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ABSTRACT

Strategies and materials for reading instruction in adult basic education are covered, together with psychological and sociological characteristics of undereducated adults. Demonstration centers, curriculum materials programs, and related efforts are described. Such innovations as basal series for sequential reading skill development, programed materials, and television workbook programs are evaluated, with special attention to principles of computer assisted instruction program preparation and the limitations and potential values of the method. Job Corps reading and basic education program elements, including counseling and guidance services, student selection and placement, staffing, teacher training, physical development and recreation, and special cooperative projects, are outlined; program procedures and outcomes are tentatively assessed. Also considered are the accomplishments and the performance goals of the Urban Adult Education Institute, Detroit, in preparing teachers and training disadvantaged adults; experiences and insights on individualizing instruction; teacher characteristics and limitations; and the emerging professional role of adult basic education teachers. (ly)

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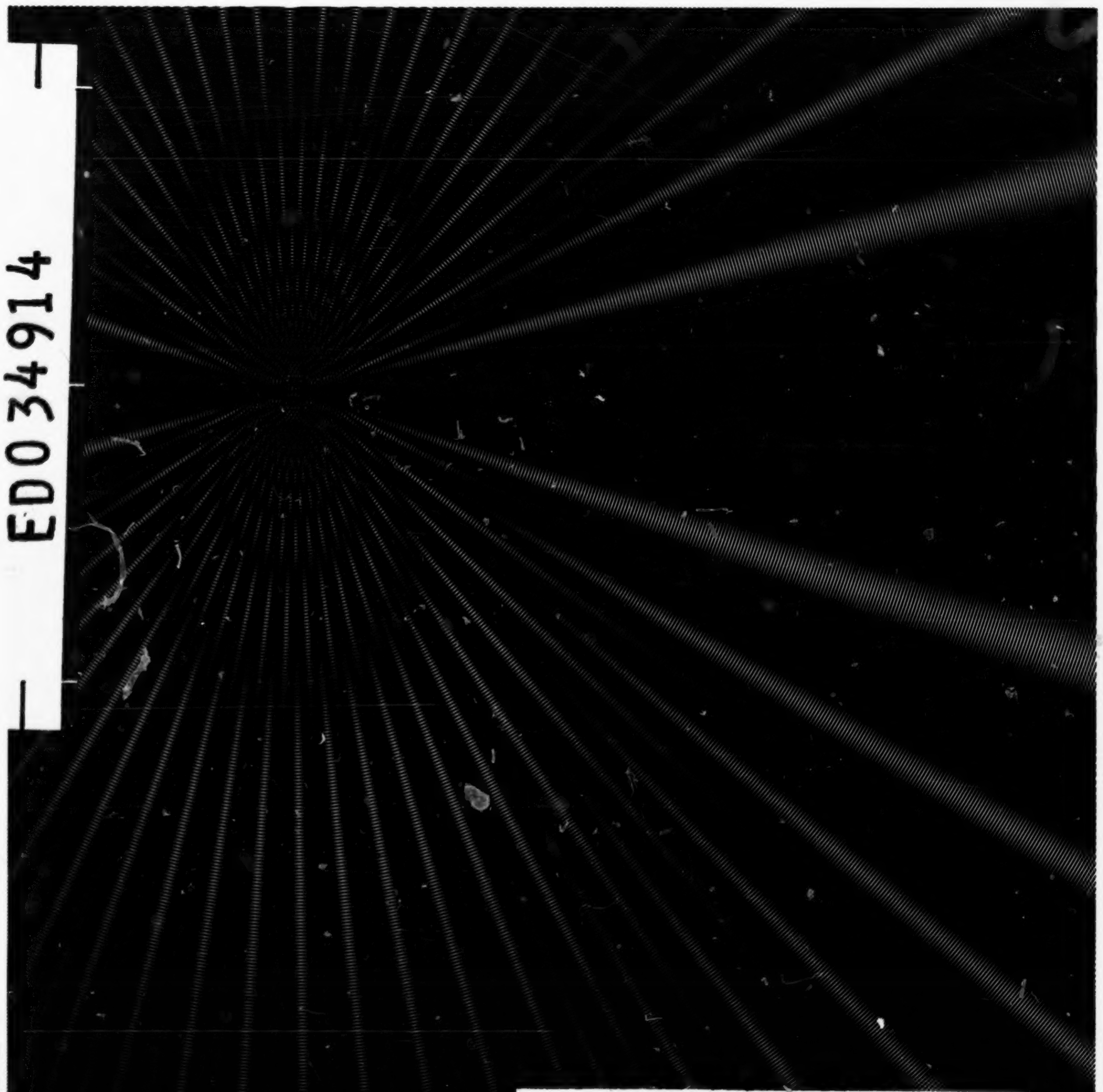

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PERSPECTIVES IN READING NO. 11

Strategies For Adult Basic Education

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Foreword

Any organization concerned with the improvement of reading instruction and, hence, the development of mature readers who can effectively and efficiently cope with the reading materials in their environments, must turn to the crucial needs of the underachieving adult. Realizing that IRA could have a vital role to play in helping needy adults achieve their reading potentials, President Theodore Clymer and the Board of Directors established a Literacy Committee in 1964 with Lynette Saines Gaines as its first chairman. Under the subsequent chairmanship of Dr. William D. Sheldon and his committee, many avenues of possible activities were explored and informal conferences were held with members of other organizations and with governmental agencies who were interested in similar problems. As a result of Dr. Sheldon's efforts, a number of programs dealing with the topic of basic education for adults were conducted at IRA meetings and in conjunction with other organizations.

In 1967 when Joseph Mangano, present chairman of the committee, succeeded to the chairmanship, the major task set for the committee was to plan and implement a Perspectives Conference on the topic, "Strategies for Adult Basic Education," which was to be held prior to the annual IRA convention in Boston, April 24-27, 1968. This publication contains the major papers delivered at that conference. The reader will find a diversity of ideas in a variety of frameworks—both at conceptual and pragmatic levels. Three major trends of thought appear to thread through the volume: 1) understand and respect the adolescent and adult learner; 2) train teachers who will ascertain the immediate goals of the learners and will strive to develop procedures to meet those goals; 3) experiment with and evaluate innovations with the certainty that there is no panacea but that a variety of materials and methods must be tapped to meet the goals of each learner.

Mr. Mangano and the members of his committee (renamed the Committee on Basic Education for Adolescents and Adults) are planning additional activities, some with other professional organizations, which should contribute significant ideas to the growing body of knowledge in this field. Mr. Mangano is to be congratulated on his capable leadership, not only as chairman of the committee, but as the director of the Perspectives Conference and editor of this volume.

H. ALAN ROBINSON, *President*
International Reading Association
1967-1968

The International Reading Association attempts, through its publications, to provide a forum for a wide spectrum of opinion on reading. This policy permits divergent viewpoints without assuming the endorsement of the Association.

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Adult Basic Education Programs—An Overview

Joseph A. Mangano
The University of the State of New York

In 1960 the United States Census reported statistics indicating the educational level of the population. This publication, for the first time, reported facts which prior to 1960 were known by relatively few American educators and social leaders: that 23 million American adults over 25 years of age have completed less than eight years of schooling. For the most part, this large segment of society is being barred from the benefits and opportunities of an affluent society and it indicates a high correlation between lack of upward economic mobility and lack of literacy. This report, followed by federal legislation aimed at upgrading the social and economic levels of the nation's poor, brought to the attention of the educational community the pressing need for programs designed to raise the literacy level of America's undereducated.

The myriad of federal programs legislated since 1964—such as, the Job Corps Program, the Manpower Development Training Act, the Adult Education Act of 1966, and many projects under the Economic Opportunity Program—have included in their design facets directed toward upgrading literacy skills of out-of-school youth and adults.

In the few short years that have passed since the recognition of America's adult basic education problem it has become evident that the educational community cannot solve this problem using traditional materials and lockstep methodology. Programs designed to educate the illiterate and functionally illiterate adults must be developed. It is imperative that a cadre of instructors be trained to implement programs based on the findings of research in the field of adult basic education.

The massive infusion of federal funds in the field of adult basic education since the early 1960's has created a force field into which have been swept "dreamers," "schemers," and a few "true doers." The results of some of the "doers" are incorporated into this volume.

These papers attempt to bring to the reader an overview of the psychological and sociological characteristics of the adult undereducated as well as emerging teaching methods and meterials. Existing programs, some of which are still in their formative stages, are also described.

Survey of Present Programs

DEREK N. NUNNEY
U. S. Office of Education

The central theme of this survey of programs in adult basic education is "Inspiration without direction leads to frustration." The writer has viewed adult education from various aspects and believes that the people—teachers, administrators, citizens—dealing with the problem of adult basic education are somewhat frustrated. The students are frustrated, and society is frustrated with the problems of the poor and the poorly educated. The combination of all these frustrations add up to an intolerable pressure. Something must be done to accelerate action in the 1970's. One must take up the challenge of the Kerner Report if one is to meet the needs of the millions of educationally disadvantaged in the country.

If one studies the changes that have taken place since the turn of the century, it becomes evident that society has changed over the years and grown from one based on "muscle power" to one based on "brain power." In the early part of the 19th century, industry centered around the railroad; in the early twenties, it centered around the automobile. Today, however, one lives in a world of automation and mass communication; and education plays a vital role. Today, man cannot hope to survive without basic educational skills. He must be able to read, write, and compute; he must be able to communicate with the society in which he lives.

Yet in this country today there are some 24 million adults, 18 years of age and older, who do not have the capacity to fulfill themselves, achieve personal goals, or build into their lives the values and aspirations of a free society. This figure increases by a million dropouts each year and an undetermined number of foreign born. They all have less than an eighth grade education; nearly half of them, less than five years; and approximately 3 million have never attended school at all. A meaningful work role for these people is virtually out of the question because they do not possess the basic skills needed to get and hold a job.

Federally Sponsored Adult Basic Education Programs

With the passage of Title II-B of the Economic Opportunity Act of 1964, the federal government gave its full support to the task of helping adults acquire the basic skills of reading, writing, and computing. Congress transferred administration of this program to the Office of Education under the Adult Education Act of 1966.

In an effort to solve the problems of illiteracy, the federal government has indicated its commitment most recently by the president's 1968 education message. Congress has also passed 26 laws which are administered by ten different agencies and has appropriated hundreds of millions of dollars for implementation of the laws. These numerous legislative acts all incorporate adult basic education either directly or indirectly through job or citizenship training.

Specifically, the adult basic education program is aimed at those millions of adults, 18 years of age and older, who have not attained the equivalent of an eighth grade education. Presently, all 50 states, the District of Columbia, Puerto Rico, Virgin Islands, and the Trust Territory of the Pacific are operating federally sponsored programs in adult basic education. Enrollment has increased from 38,000 in 1965, to 392,000 in 1967, to an estimated 455,000 in 1968.

Realizing that the needs of adults are different from those of children, the Adult Education Branch of the U.S. Office of Education in 1966 funded a series of teacher training institutes whose prime purpose was to orient teachers and administrators to the needs of the educationally disadvantaged adult. In 1966, teacher training institutes were held at nine universities across the country and trained approximately 1,000 teachers who later returned to their communities and conducted local teacher training programs. This year, the teacher training institutes have been expanded to 27. The institutes focus on the new educational technology and its application in the adult basic education classroom. They emphasize innovation in curriculum and management.

Experimental demonstration projects are yet another facet of the program. They are designed to find new and better methods of recruiting and teaching the undereducated.

Special Projects

Ten special projects were funded in fiscal year 1967—each different in its approach to the problem of adult basic education. It is hoped these projects will accomplish the following:

1. The Urban Adult Education Institute in Detroit, Michigan, seeks to broaden educational and employment opportunities of adults. It is experimenting with curriculum content and employing the educational sciences to serve the needs of the undereducated. Jobs have been found

for a large number of enrollees, many of whom were unemployed for periods of five to ten years. Many enrollees are now participating for the first time in PTA's, block clubs, and other community organizations.

2. The Laborers International Union, Columbus, Ohio, has set up a program learning center for union members to upgrade their employability. It is also developing new materials incorporating construction trade terminology and calculations into adult basic education.

3. Morehead State University in Kentucky is coordinating community efforts in the eight-state Appalachia region. In each state it has established demonstration centers which are conducting experiments with media and studying teacher effectiveness, evaluation techniques, counseling, recruiting, and new curricula and materials for ABE.

4. The National Educational Associates for Research and Development (NEARAD), Fort Lauderdale, Florida, is attempting to upgrade the educational opportunities of adult migrants through the use of individualized instruction and applying new educational technology in efforts to remove the stigma of the traditional classroom and to interest migrants in finishing—or even beginning—basic skills education.

5. North Carolina State University has established an adult learning center which applies educational technology in adult basic education. Through research, educators have identified characteristics of adults who are learning to read via programed materials. They have determined that computer assisted instruction and other programed instruction techniques are very effective in ABE.

6. Opportunities Industrialization Center, Philadelphia, is using neighborhood homes for short (ten-week) courses designed to help orient adults to further ABE or other training opportunities.

7. Project CABEL, in northern Virginia, has established a demonstration center which is serving as a testing ground for various programed materials for adult basic education, particularly materials for Spanish-speaking adults learning English as a second language.

8. The Southwestern Cooperative Educational Laboratory, Albuquerque, New Mexico, is using television for ABE with migrants. Home- and job-related television tapes are being prepared for Spanish-speaking migrants. Through this project, it is especially hoped that the hesitancy of many ABE teachers in using television or modern technology in the ABE classroom will be overcome.

9. The United Planning Organization, Washington, D.C., involved 211 Neighborhood Youth Corps enrollees in a three-month project. It was a cooperative effort between the Department of Defense, the Civil Service Commission, and the Office of Education and provided basic skills and

some job orientation before enrollees were placed and received on-the-job training. After completion of the ABE component of the program, 173 enrollees were employed in the Department of Defense.

10. The Head Start Parents Project, New York, provided two months of instruction for parents while their youngsters were in Head Start classes. It proved to be a tremendous success. Parents became interested in their children's education and in their communities. They continued in these efforts even after the project ended.

Projects such as these are proving that educational technology is very effective for adult basic education and holds a key to the future of the program.

The formation of the National Advisory Committee on Adult Basic Education has also played an important role in strengthening the program. The committee, established by the Adult Education Act of 1966, is charged with the evaluation of the program and reporting its findings and recommendations to the President.

The adult basic education program has hardly begun to scratch the surface, but it is paving the way to new opportunities for the millions of undereducated adults. These adults want to know how to read a package label, total the cost of their groceries, and read a ballot. They are looking for that first step toward security and status for themselves and their families. ABE has enabled many to enroll in vocational training and high school equivalency programs. In many cases enrollees have found employment for the first time. Some who had jobs have received promotions as a result of their training; others have found better-paying jobs. Many have passed the GED and now have a high school equivalency diploma.

Summary

The adult basic education program alone cannot solve the myriad of problems that exist. It is more critical than ever that local efforts be encouraged. State departments of education and various private organizations, such as the Massachusetts Council for Public Schools, should be encouraged to lead the way in creating a more meaningful life for millions of undereducated adults.

Through a combined effort one needs to produce a critical mass to insure real and permanent change in the traditional education system. One needs the help of universities, business, industry, and professional organizations to produce this critical mass.

Recently at the Second National Leadership Conference on Adult Basic Education held in San Antonio, Texas, approximately 130 leaders in the field of ABE met for a week to discuss the growing needs of adults in this country. By the end of the conference, members had come to realize that one must now ask, "What is critical? What is crucial? What is nice to do?" in the adult basic education program.

What does one consider to be critical at this time? As an educator, the writer feels the young adults of the country between the ages of 18 to 25 hold the key to a brighter future. To many of them, life now holds no hope—only bitterness and frustration. What can they hope to achieve unless there is someone who cares? One must care! As educators one is dedicated to the task of reaching out to help these young adults find their places in society—places where they can serve themselves as well as their neighbors. One must help give direction to their efforts to ensure that their inspiration will not lead to frustration and rejection but to a rewarding, self-fulfilling role in society.

The time is now—not a week from now, nor a month, nor a year. Much interest has been stimulated by the adult basic education program. It has opened the door to the disadvantaged adult for a more satisfying and productive life. One must see that the door remains open.

Teaching Reading To Educationally Disadvantaged Adults

William F. Brazziel
Virginia State College at Norfolk

A friend asked this writer recently to visit and observe in the classrooms of the adult basic education (ABE) program he had initiated a few weeks previously. He said he had the feeling plus some evidence that there were factors being overlooked in the approach of the faculty and administrators to the program and that the high potentials of the program would not be realized.

A conference revealed that none of the teachers or administrators had taught adults before, although each had had public school experience. None had been in a preservice training program on the teaching of adults. No inservice training program was in progress. All had taught disadvantaged children, however, and most were from the area and were interested in its economic and educational development.

During classroom visits, the writer saw many honest and human errors. In the first classroom students were seated in rows although tables instead of desks were used for classwork. The teacher had placed the tables in rows. The students were required to stand and recite. In another classroom, the older people were seated in the rear with the younger people up front. The teacher worked on the chalkboard.

In one particularly difficult situation, the teacher called all of the students by their first names. All of the students were Negroes. When this custom was mentioned during the lunch period, the teacher, a Caucasian, said that this policy was according to how she had been raised and that she saw little reason to change at this late date. After a long moment of silence, she then volunteered her opinion that President Johnson had gone too far. This opinion was not explained in detail.

One teacher complained that half the class, offering the need for glasses or new glasses as a reason, refused to read on the first day.

One of the new reading-materials systems had been ordered for the classes, but it had not arrived. One teacher was using a pamphlet from the bank for reading exercises. Another taught phonics from the chalkboard. Another had developed an exercise utilizing a set of pocket dictionaries.

All work was interrupted in each classroom when the writer's party entered, and the teachers asked that the visitors address the class. After feeble "words of greeting" and "wishes for success" from the visitors, a man would arise and in sonorous and well-rehearsed tones express the appreciation of the class for the group's presence.

One could go on.

The project described is still in operation, and some improvements have been made. In spite of the anxieties of its director, it is doubtful that any dire circumstances will befall it. The potential of such an effort will simply not be realized. The teachers will assign and hear the lessons. Tests will be given and scored. Grade level gains—or lack of them—will be computed. Life in the community will go on—as before. The potential of ABE as a catalyst and change agent will not be realized. Even the basic 3R potential will not be fully realized. This was the concern of its director, and it is a concern which those persons with similar interests should bear in mind today.

Principles Affecting Adult Learning

How can one come to truly know and be able to work with disadvantaged adult learners? How can one develop teaching styles and approaches that will be meaningful to them and enable them to learn? How can programs help these adults make things better for themselves and their communities and, consequently, help make a new sociology in America?

One can best understand disadvantaged learners, perhaps, by first understanding how adults learn generally and then add to this knowledge that which has been gained from experience and research on disadvantaged adult learners. There is a moderately growing literature in both areas. Some notable efforts include Kuhlen's *Psychological Backgrounds of Adult Education* (*6*) Aker's *Adult Education Procedures,* (*2*), the ABE Curriculum Guides of the U. S. Office of Education (*5*), the NAPSAE Teacher Training Guide (*1*), and Brazziel's *Workers' Decisions to Retrain (4).* Consider some of the sociopsychological principles from this literature.

Adults are motivated learners. This axiom dates to Thorndike's research on adult learning and intelligence some fifty years ago, and experience over the years in various adult programs has strengthened it.

Perceptual equipment of adults deteriorates with the passing years. Eyes are dimmer; hearing is less sharp; reaction times are slower; but adults overcompensate for these deficiencies by intensity of effort, long attention spans, and increased motivations. Also, adults' backgrounds of experiences are broader than children's, and learning is thus facilitated. Many of the psychological problems that prevent adolescents from achieving their full learning potential have been overcome by mature adults. As a result, many adults "out-learn" adolescents.

Disadvantaged adults are little different in this respect. Present efforts to teach reading to such persons have produced many success stories. Perceptual impairment is more severe in disadvantaged groups, however. Social services to correct this situation should be provided when needed. Many disadvantaged adults do not receive proper treatment for perceptual impairments because of the lack of money to help themselves, because health services in the community are inadequate, or because the process for receiving the necessary assistance in some areas is demeaning and degrading. Program directors and reading teachers can do much to correct this situation.

Adults are pragmatic learners. Robert Havighurst succinctly describes this principle as the "teachable moment."

Havighurst points out that people learn best when certain points of maturation, interest, and need have been reached. He might have added that this principle applies particularly well where adult learning is concerned. Some of the most efficient learning in child development is achieved by young mothers or expectant mothers; in finance, by potential investors; and in soil chemistry, by young farmers in the spring plowing and fertilizing season.

Disadvantaged adults also relate learning to the problems of the day. Sometimes these problems are especially severe, and learning is very pragmatic. Some of the most efficient learning in present ABE programs has been spurred by and related to the need to get a job, receive a promotion, handle money more effectively, or avoid being bilked in daily dealings with others.

This statement does not mean that students will limit their reading to the mentioned areas. Far from it. But such concerns often bring students to ABE classes and remain central concerns and goals while the students are enrolled.

Adult students must be treated as adults. This point seems too obvious to deserve attention, but habits of teachers are sometimes hard to change. For some teachers, complete order must prevail and rows of seats must be maintained. Learning must commence when teaching starts and stop when teaching stops. Teaching of this sort is bad for children and disastrous in the adult classroom. The stand-and-recite teacher probably reduces her potential by fifty percent. The racist gives aid and comfort to Rap Brown.

Adult education programs must have dignity and bolster egos. These necessary features are again, simple common sense and yet are widely ignored and result in recruiting and attrition problems, as well as ineffective learning in the classroom.

Dignity—or lack of it—begins with the first news releases which announce the program. The program can be depicted as a welfare hand-out for stupid, culturally deprived illiterates, or it can be presented as a much needed effort to broaden the talents of the human resources of the community. The ABE director decides which role he wishes his clients to play. The clients, in turn, decide whether to play the role. They can ignore the program or, if enrolled, leave it or they can learn from it.

Adults are independent learners. The good adult education program is the perfect prototype for the nongraded school with individually prescribed instruction which many school systems are striving for today. In Job Corps and MIND programs and in many public school ABE programs, a student can enter class any day of the year, be placed at a proper level of learning, assume 60 to 70 percent of the responsibility for his education within the classroom, have his competence level tested and certified by teachers and administrators of the program, and move on to more education or to interests outside the program. A student can leave the program when more pressing matters demand his attention and return any time he is able. There are no report cards, and registration is never closed. Students are not "promoted" or "held back." There is no homogenous grouping which prohibits intragroup learning—no bluebirds and redbirds, just continuous, purposeful learning.

Adult learning is often hampered by concerns of the day. This principle, which is especially pertinent for disadvantaged adults, is too often forgotten or fails to be appreciated sufficiently. It is significant that Daniel Moynihan felt constrained to remind a congressional committee recently that poverty means that people do not have enough money, that poor people in the present era of high prices are in deep trouble, and that a meaningful antipoverty program would enable people to get money and thus avoid trouble. Even more significant was the stir this statement caused among the committee members, among the spectators, and in the press. The Second Coming could hardly receive wider treatment.

Some teachers who were not raised in the depression and too many who were do not seem to grasp or remember how complicated life can be when people do not have money. Such teachers, dwelling at great length on personal shortcomings and lack of proper "motivation" and "attitude," often blame the poor themselves for not having money. Observers have noted that the War on Poverty in some communities and programs has often degenerated into a "War Against the Poor."

Part of this unfortunate situation might be sheer ignorance of the effects of deprivation on health, personality, emotional states, and aspirations. Briefly, it is as if each of these deprived individuals had been given twenty lashes—with a sledge hammer—every day of life. When race is added to poverty, the lashes could be raised to forty. Some teachers and administrators who do not appreciate this fact, especially in a time when the mass media give almost daily lessons on it, should be teaching the advantaged.

Another dimension of this problem is psychological in nature. People have a tendency to abhor and strike out at personal weaknesses of others which they, themselves, are trying to outgrow, live down, or repress. Others feel threatened status-wise to teach disadvantaged people. "What will my friends think?" they may ask. In still others, latent racist feelings are aroused and reinforced.

Harry Miller treats this dimension at some length in his book *Teaching the Disadvantaged.* He suggests a reorientation of the entire industry which deals with poor people to achieve better mental health for the professionals involved. He also suggests provisions for group and individual therapy for persons needing it to carry out their responsibilities successfully.

Adults pace themselves as learners. This fact is especially true of disadvantaged adults. Their pace is apt to be much slower than that of their advantaged counterparts.

A cultural concept of speed in tasks accounts for this deliberate pace. Most psychologists refer to the phenomenon as the craftsman's concept of pace. While many disadvantaged learners are not craftsmen, most admire craftsmen and do semi-skilled work at times; many aspire to be craftsmen and are training for occupations in this category.

A casual observation of craftsmen and, say, clerical workers will illustrate the point. Words are typed at a furious rate by the clerical worker. Mistakes are rather easily corrected. Flawed materials, such as paper and carbons, are relatively inexpensive. Poor workmanship can be shut away in file cabinets. None of this is true with the craftsman. Mistakes ruin costly materials. Mediocre work by a carpenter, for example, is there for all to see. The children of craftsmen or young persons aspiring to become craftsmen are, therefore, taught to be very deliberate and careful. Inaccuracy is strongly discouraged. All of this conditioning carries over into the adult learning process.

Principles of motivation, serial position, and reinforcement apply in adult learning. Adults respond, as children do, to topics and to materials which have intrinsic value, which are organized to give good serial position effect, and which are reinforced well.

The nature of the curriculum will determine to a large extent whether motivation will be stimulated naturally or whether great effort will be required of the instructor. Just as children are, adults are motivated most when topics and materials mesh with needs in their lives. Teachers who note that set curriculums and manuals are not meeting needs should augment, discard, modify—in short, change directions—to assure that more meaningful instruction is made available.

Teachers control completely the serial position of the material, i.e., order of presentation or consumption. Teachers can also assist immensely in the reinforcement process. It is inappropriate in the adult classroom to give stars, make honor rolls, pat heads, or make use of other techniques which may be effective with children. Adults respond to low-keyed words of praise, reinforcing murmurs, nods of the head, and assistance in self-evaluation and reinforcement. Observers have noted that many of the new materials systems seem to work especially well with adults because of the latter aspect (*3*).

Group dynamics can be a valuable tool in the adult classroom. The dynamics of instructional groups can be utilized to furnish learning cues, to enable advanced students to assist less advanced students, to control attrition in the class, and to serve as a catalytic agent in the advancement of upward mobility on the part of students and, in some cases, of the community.

The teacher who places her students in rows and demands order and application of effort is utilizing less than half of the teaching resources available to her.

The model adult class is a lively, diverse system of constantly shifting groups and individuals. A small basic work group might be working on a phonics chart in one corner while another group might be discussing consumer economics elsewhere. At one round table a student might be explaining finer points of long division to two classmates as the teacher goes over a self-evaluation with another student. Another group or an individual, using one of the new desk-type cartridge projectors, might be working with 8 mm single-concept film while still others work with a language master on pronunciation. And so it goes.

In this interaction, wise teachers try to maintain basic work groups and foster a sense of community. The ABE class then represents an activity from which a student will not casually withdraw. Personal relationships are established. Allegiances have a place in the order of things. Attrition is reduced.

Adult classes have the potential for "broad ripple" effects in the community. Teachers should teach disadvantaged adults with this fact in mind. Learning and education are powerful tools for changing the human condition: better jobs are acquired; promotions come more regularly; income is increased; children are educated better; reading is broader; life has more meaning. The writer, having seen this process in operation, can attest to its potential and recommends it as a teaching goal.

Now the upward-mobile adult family is the one to "keep up with" in the community—the Joneses. Others must do likewise. The word spreads. ABE enrollment increases. More Joneses are produced. The ripple grows even wider. Soon, hopefully, one's work is done and he can happily move on to other things.

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Innovations in Adult Basic Education

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Until recent years sentimentality rather than sense dominated much of the basic education designed for native-born adults (*9*). With some notable exceptions few state or local boards of education accepted the responsibility for educating the functional illiterate, and much of the educating that was done seemed to stem more from the heart than from the brain (*5*). What was done, except in times of crises such as World War I and II and the depression of the 1930's, was aimed more at helping the individual rather than at changing the social system. Few people recognized that poverty and its cohort, illiteracy, were outcomes of the social system; and most state and local educational systems did not accept adult basic education as a major responsibility. The prevailing philosophy until World War I was that it was largely the individual's fault if he was poor and illiterate—unless he was an immigrant who needed a basic education in order to meet the needs of the labor market. In that case, many large cities offered basic and Americanization education (*2*).

With the advent of the depression, the federal government began to take a major responsibility for directing social change; and among the means used was a basic education for many of those employed in the Civilian Conservation Corps camps, WPA projects, and in NYA projects (*6*). Materials for teaching reading to native-born adolescents and adults were developed and used on these government projects. Those included materials for teaching the uneducated to read advertisements, road signs, cartoons in newspapers, and vocational training manuals (*7*).

From the depression until the present decade, most of the materials that were developed used the workbook approach, and they appear to have been designed for a lockstep instructional method. All went far too fast for the average student, with some attempting to cover readability levels one through four in some 200 pages (*3*). Few publishers bothered much with materials designed for teaching uneducated adults, and it appears that little had been learned about teaching reading to adults from 1935 until the present decade.

New Materials and Approaches

In the 1960's with the advent of the Great Society, poverty and illiteracy began to be regarded as a curable fault of the society. The responsibility for correcting this fault was accepted by the federal government, and funds were made available for adult basic or prevocational education (*4*). These funds gave an impetus to the development of new materials and new approaches to those materials; thus the 1960's saw a rash of new publications (*1*, *8*). While many of the materials that came on the market in the 1960's have proved to be inferior to some of the older materials, some represent a definite advance and display far more sophistication about the field than did most of the materials developed during the period between the 1930's and 1960's. It is with a selected group of the newer publications for adult basic education that this paper will deal. The criteria for selection included innovation, content, and methodology. The inclusion of these materials does not mean that they are endorsed by the Florida State Fundamental Education Materials Center but rather that it is believed educators in basic adult education should be aware of such matter. For purposes of classification these materials are separated by "method."

Basal series. This method is generally developed through a related series of books, one or more on each readability level, with a planned sequential development of reading skills. These skills are emphasized progressively using a cumulative vocabulary with the introduction of new words usually rigorously controlled. Its outstanding features include the preplanned sequential development of skills and the abundant suggestions and plans available to teachers for guiding instruction. Some drawbacks are that its use may tend to stifle teacher inventiveness and that it lends itself to lockstep instruction. It tends not be conducive to any great degree of flexibility. Two examples of this method are given; however, it should be noted that at the time of this writing, no series comparable in sophistication to the basal readers designed for children exists for use with adults.

An example of this approach is the *Mott Program.* This program of numerous related workbooks has many of the better features associated with the better basal reader series. It is well accepted by many adults (although rejected by some) and offers excellent guidance to the teacher who knows relatively little about teaching reading. The series covers readability levels 1 through 12. *Reading 300* encompasses readability levels 1 through 3 and provides exercises for the development of word attack, spelling, writing, composition, listening, and understanding skills. *Basic Language Skills 300A and 300B* provide instruction in reading, writing, spelling, vowel combinations, and irregular spellings. The *Word Bank 300* offers a photovocabulary and related exercises. *Basic Numbers and Money 300* offer basic mathematical skills. *Basic Language Skills 600A and 600B* present lessons in reading, spelling, word study, and composition. *Basic Language Skills 900A and 900B* provide instruction in vocabulary building, comprehension, spelling, English usage, oral reading, rate improvement, numbers, charts, maps, and graphs.

Other examples of the basal series method are the Follett *System for Success* and the Follet *Communication Series.* Both of these series are under constant revision and will probably be extended upward. Stress is placed on "family phonics" in one and on a "linguistic" approach in the other. The gamut of reading and writing skills is presented.

Multilevel programs. The multilevel reading kit or laboratory offers a package of individual lessons on several different reading levels. Each lesson is independent of the others, and skills are not sequentially developed from lesson to lesson, but rather from readability level to readability level. An outstanding feature of this approach is flexibility. Two examples are given.

The newest kits especially designed for adults and the *Reading Development Kits A and B* published by Addison-Wesley Publishing Company. Kits A and B each contain 80 different (160 total) coded lesson pamphlets on readability levels 1 through 6. Within Kits A and B are four separate series. Kit A includes Series X, 100, 200, 300. Kit B includes Series Y, 400, 500, 600. Series X and Y consist of articles and skill development in critical reading and thinking. The remaining series contain high-interest articles written in the content areas of science, work, health, safety, and law. Each pamphlet contains exercises for developing vocabulary and comprehension skills. Teacher's manuals, student answer booklets, and placement tests are included.

S. R. A.'s *Dimensions in Reading* contains selections written on readability levels 4 through 11. The 300 pamphlets are designed to develop comprehension, but little is done with word attack skills. Interest level is high, and the format is highly acceptable to adults. Stress is placed on occupations, conservation, and nature topics. A teacher's manual is included.

Programed materials. Programed instruction comes in several varieties. It can be linear or scrambled book form, or it may be presented by machine. It is a proved method of instruction that works well for some people, particularly in teaching certain reading skills. However, it can be deadening if used for an extensive period of time or if used exclusively. Its outstanding features include the following: each student works individually at his own rate; feedback and reward are immediate; skills are presented progressively with varied repetition. A drawback is that students cannot successfully spend lengthy periods of time working at it. Two examples of this approach are given.

McGraw-Hill's *Programed Reading for Adults* goes from beginning reading through elementary stage. The vehicle is a series of workbooks, programed in a linear fashion, which are acceptable to adults. The word attack program is strong, but the comprehension skills are sorely neglected. It goes too slowly for many adults, and many find it tedious.

California Test Bureau's *Lessons for Self-Instruction, Reading Comprehension* offer instruction in *Following Directions, Reference Skills, Reading Interpretation I*, and *Reading Interpretation II*. The readability levels go from four to nine with all four titles at each level. A Crowder-type approach is used; and while this saves space, it confuses some students who, having failed to understand the first reading, are sent back to reread the same material.

Television-workbook programs. Radio and television have both been used in basic education. However, since both are beamed to large audiences, both are lockstep approaches lacking flexibility. These media are inappropriate for education at the lower stages, and present programs violate the basic tenets of adult basic education teaching.

Operation Alphabet is a TV program designed to teach adults to read up to a third grade level. A workbook accompanies the program and can be used by itself. *Operation Alphabet* has not been demonstrated to be an effective way of teaching adult illiterates; however, it may be a vehicle for publicizing the need for basic education and for attracting students to adult basic education classes.

Related work-text programs. This is somewhat of a catchall category. These are programs in which a company has published a number of basic training materials which complement one another but which were not necessarily planned at the time of writing as a part of a correlated program.

The *Steck-Vaughn Programs* developed for adult basic education are among the most popular materials in use. Some, such as *Adult Reader*, go back many years while others, such as *Steps to Learning*, are fairly new.

These materials are high-interest materials with appropriate adult content and are very well received by adults and adolescents. The materials tend to be traditional in their approach (they practically set the tradition!).

Reader's Digest Adult Readers and *Reader's Digest Skill Builders* combined offer a traditional approach to adult basic education. Although the *Skill Builders* were developed for children, content and format are suitable to most adults. These two series are suitable for use through the elementary stage; but, as with all programs, they will not fit all students. Exercises for comprehension and vocabulary development are included in both series.

Machine-centered programs. Machine-centered programs are those in which a projector or other hardware forms a crucial part of the program. Some of these programs work quite well; however, most are quite expensive, and research is needed to determine if the additional expense can be justified.

The EDL *Learning 100* is a well-designed adult program with all major reading skills taught. Several machines are involved; and unless care is used, it could become a lockstep program for adults that is group rather than individual oriented. The program can be obtained in part or in whole. To this reviewer, the machines in the program that make major contributions are the Aud-X and the Reading Rate Controller. The content used is of high interest and controlled readability. All major reading and listening skills are presented.

The *Craig Reader* is in essence a motivational device. It has not been well received by sophisticated adult teachers, and the software for the machine was at the time reviewed most inadequate.

Experimental computer-assisted instruction is being carried on more extensively now than ever before. Programs are being written to teach various reading skills, including vocabulary and comprehension. Computer-assisted instruction has been tried on a small scale with adult illiterates. It has proved that it can do the job, but much research still needs to be done before any full scale use of this method can be justified.

Newspapers. The New Reader's Press, *News for You,* is a weekly, four page newspaper written on two levels. Level A has a readability of grade 3, and Level B has a readability of grade 4. It comes with a teacher's guide and contains photographs, feature articles, and news items. Adults tend to like it, and it is relatively inexpensive.

Summary

The several categories covered give a fairly good representation of the kinds of materials available. But what does the future hold? At this time it seems that the next decade will see more and more kit programs, more programed-instruction workbooks, more programs that use audio-visual aids, and the advent of computer-assisted instruction as a major method of teaching functional illiterates. There will probably be several more attempts at TV instruction in basic education, but hopefully the TV instruction will be directed toward teachers rather than students.

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The Job Corps Literacy Program

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On a bitterly cold, cloudy day in mid December of 1964, I stood for the first time in the center of a ten-acre plot of arid New Mexico desert not far from the town of Grants. This was the site of a 220 man Job Corps conservation center. Arroyos five feet deep scarred the adobe earth. A twelve thousand-foot mountain served as a glowering backdrop to the scene.

Many thoughts raced through my mind as I glanced about. I knew that within three to four months some 200 or more Job Corpsmen would descend on this spot from urban ghettos and rural hallows, disembark from buses, and view essentially the same vista. Surely there would then be buildings and dormitories. But at that moment, I wondered whether they would see anything but the grim scene that I was now viewing.

Consider that at this point in time none of us had ever seen a real, live Job Corpsman. We had been presented with many statistical profiles of what he would be like educationally, socially, anl otherwise. As a teacher I assumed that I had seen hundreds of them as non-learning faces in my classrooms. As a principal, I knew that I had ushered many of them out the school door because they were a "detriment" to the 65 percent of my students who "wanted" to learn.

Nagging doubts entered my mind. Would the population really be different because it volunteered to enter the program? Could it really be motivated to learn to read? Could any program, no matter how different, really erase the deep scars of 16 to 21 years of social, economic, and educational deprivation. I wondered whether an urban Negro from Watts would panic at the sight of the beautiful but bleak landscape of New Mexico. I doubted that it was possible for these young men to live and work together—white and black, rural and urban, Spanish speaking and Indian. These were questions that only time would be able to answer.

Better than three years have now passed, and 110,000 of society's "losers" have come to Job Corps out of a degree of desperation that caused them to leave, voluntarily, whatever they had and go to such incongruous places as Kicking Horse, Montana; Eight Canyon, New Mexico; and Crab Orchard, Illinois. As Peter Schrag put it in his Job Corps article in a recent issue of *Saturday Review,* “The very act of joining the Job Corps is a confession of inadequacy and therefore an act of courage.” But this step is necessary because the Job Corps is a voluntary program. The corpsman must see the need to take this step. Correspondingly, the Job Corps must in turn meet, in every way possible, the needs of the corpsman. The old adage “School is for the kids” has real meaning in this program.

Establishment of the Job Corps

The Economic Opportunity Act of 1964 established the Office of Economic Opportunity and within it the Job Corps for the purpose of “increasing employability” and preparing disadvantaged youths 16-21 years of age for “responsible citizenship.” Thus the federal government moved directly into the *operation* of a major adult basic education program.

While creating a system reminiscent of the Civilian Conservation Corps (CCC) of the 1930’s, Congress went much further in this act. Basic education was to be the cornerstone of the program—not an afterthought. Federal lands were to be utilized and improved again; but private corporations, universities, and foundations were contracted to operate many of the larger centers. Unlike the army-operated CCC, Job Corps planners assiduously avoided any connection with the military. Every effort was made, as the program took shape, to assure the enrollee that his “chance to be somebody” would be a fair chance—one in which he would have the final say. It was to be a volunteer program with no established tour of duty other than that the time involved was not to exceed two years. The Job Corps centers were given the charge to make their program meet the needs of the corpsmen—not of the staffs and not of the departments of agriculture and interior (who were to operate the smaller centers on federal lands).

The initial reaction from the educational establishment was predictable. Cries of a “competing federal school system” and other cliches were heard. The desire on the part of OEO officials to make the program as much unlike the school from which the corpsmen dropped out was interpreted as a direct criticism of the public schools. A serious lack of communication between educational leadership and Job Corps was an unfortunate fact during the first years of the corps’ existence. Only now, after three and one-half years of operation, information channels are being widely reopened between the two factions.

The Job Corps Philosophy

What is the Job Corps really all about? Phrases such as "adult literacy" and "residential program" and "adult basic education" only begin to tell the story. This is a program of total human renewal. It tries to compensate, in a relatively short period of time, for the critically important years that disadvantaged youth spend in social, economic, and educational deprivation. Job Corps attempts to renew the spirit of each member by raising his unbelievably low self-concept—a concept which most enrollees bring with them. That is the most important objective of the program. The whole program is aimed at making an individual conscious of his worth, skills, and capabilities in order to help him live a useful and productive life in society. Job Corpsmen have "heard that song before." We, in the microcosm of the Job Corps Center, try to live it twenty-four hours a day, seven days a week. We don't like always fully succeed for every boy and girl, but I feel we do make a mark on all of them.

In attempting to achieve its goal, the Job Corps teaches reading, arithmetic, and communication skills to youth who cannot read a sentence or solve a simple arithmetic problem. The corps offers guidance to young men and women who come from broken homes with little adult supervision or control. It offers medical and dental care for its members—the majority of whom have had no previous contact with a doctor or dentist. The Job Corps teaches vocational and employment skills to youth who have not only never held jobs but who also lack the ability to find employment. It teaches the importance of respect and responsibility to youth who have internalized bitterness and hostility as a result of their deprivation. The corps shows young people that differences and problems are better resolved by democratic processes than by violence. In summary, the Job Corps provides the alternative of productive and responsible citizenship for thousands who might otherwise have known continued proverty, illiteracy, unemployment, welfare, and delinquency.

Selection of Enrollees

Our population of 16- to 21-year-old disadvantaged male youths are enrolled through the local branches of the U. S. Employment Service. Females are located by a nationwide volunteer group, the Women in Community Service (WICS). Enrollees are screened for appropriate background, i.e., level of poverty in home, lack of proper supervision at home, years of school, welfare background, as well as criminal records, reading and math levels, and health.

Every attempt is made to enroll those most in need of the program. Records of applicants with a history of frequent or felonious crime are examined by a review board in Washington to determine fitness for the program. We do not harbor criminals, but we are dealing with youth from the lowest socioeconomic stratum, about one third of whom have arrest records. Actually, according to FBI reports, our enrollee arrest rate of 2.43 per hundred youths looks good in comparison with the national average of 6.5 foı the 16- to 21-year-old population.

Based on the results of a brief reading and mathmetics test, a decision is made to send the enrollee to either a large (1000-3500) urban center where higher-level vocational skills can be taught to the better educated or to a small (100-250) conservation center (for men) which stresses basic and remedial education. Approximately 40 percent of the conservation center population comes to Job Corps functionally illiterate despite an average of 8.8 years of schooling. The average reading level for all male corpsmen is 4.8 years. The typical female enrollee has a 6.2 year reading level.

Educational Program

Since the education program at the 76 Job Corps conservation centers is more akin to an adult basic education program, it will be described in some detail.

Basic Education. Young men entering Job Corps have a wide range of skills and abilities. Some are unable to read or write; most show weaknesses in one or more subject areas. The task of a conservation center basic education program is to determine what these deficiencies are and to provide appropriate instruction. The purpose of basic education is to equip trainees with fundamental communication and computational skills which are needed in order to profit from vocational training and to get and keep a job. The system permits each student to begin work at his own level and to proceed at his own pace. Because the program is specifically designed to accommodate individual differences, the instructional pattern and rate of progress will differ for each corpsman.

A. Reading

The conservation center reading program is divided into three major segments. Each corpsman is assigned according to his reading skill as measured by placement tests.

The beginning reading program is for students whose reading abilities range from nonreader through the equivalent of third grade. Placement tests assign a student to a specific level within the program which includes a teacher-administered prereading sequence, self-instructional books, progress tests, handwriting practice, and remedial exercises.

Success in beginning reading advances a student to the graded reading selections.

The *graded reading selections* are for corpsmen with third through seventh grade reading abilities. This portion of the program consists of 2,000 brief articles which have been classified into nine levels of difficulty. A corpsman is assigned to one of these levels on the basis of placement tests. Topics include a variety of subjects of interest to 16- to 21-year-olds. Many of the subjects are work-related. Corpsmen select topics of their own choice and advance to higher levels by performing satisfactorily on comprehension tests which accompany each selection. Completion of Job Corps Level 9 enables a corpsman to begin the advanced reading program.

The *advanced reading program* is for corpsmen who read above the seventh grade level. It consists of materials designed to increase skills in comprehension, speed, and vocabulary. Advanced readers may also serve as instructor's aides to assist students at lower reading levels.

To supplement the basic reading program, each center provides a reading pacer for speed drills and an audio recorder for speaking and listening exercises. In addition, each corpsman is encouraged to use the center library which contains periodicals, newspapers, reference materials, and a wide variety of books classified by reading level and topic.

B. Mathematics

The Job Corps mathematics program is designed to teach computational skills which are necessary to get and keep a job and to manage personal finances.

A diagnostic test series pinpoints the specific skills for which each corpsman needs instruction. Corpsmen may bypass units and do not have to cover materials for which they demonstrate proficiency.

The mathematics program consists of six major components:

1. Whole numbers—addition, subtraction, multiplication, and division
2. Fractions—addition, subtraction, multiplication, and division
3. Decimals—addition, subtraction, multiplication, and division
4. Percentages
5. Measurement
6. Advanced mathematics

The basic material is divided into 71 self-instructional units which allow each student to advance at his own rate. Each book contains self-administered progress checks and teacher-administered unit tests.

The advanced student is provided with instructional materials for algebra, statistics, slide rule, geometry, and graphing and computing devices.

C. Language and Study Skills

The language and study skills program is designed to develop communications and interpretive skills. The instructional system is divided into several major components:

1. Handwriting—manuscript and cursive
2. Spelling—emphasis on correcting common spelling errors
3. Letter Writing—business and personal
4. Composition—use of topic sentences and paragraph organization
5. Grammer and Punctuation
6. Vocabulary Improvement and Word Usage
7. Reference Materials—dictionary, maps, globes, graphs, and encyclopedias

Diagnostic placement tests determine the level at which a corpsman should be placed in each of the program components.

Materials include filmstrips, workbooks, reference books, study kits, and self-instructional programed texts. Subjects are frequently work-related.

Prevocational and Vocational Education. The prevocational and vocational training program of Job Corps conservation centers is designed to supply corpsmen with entry-level occupational skills and related knowledges and attitudes. Such training has three basic directions:

1. Broad prevocational education and experience
2. Specific entry-level vocational training
3. Concentrated work-education coordination

Prevocational education includes the world of work, general performance skills, and consumer education curricula and enables all corpsmen to participate regardless of educational achievement. It has as its objectives development of the following:

1. Positive attitudes toward work
2. Knowledge of personal interests, skills, and aptitudes
3. Knowledge of where and what jobs are available
4. Skill in getting and holding a job

5. General performance skills which are applicable to a wide variety of jobs
6. Skill in consumer practices related to buying wisely and handling money

The entry-level vocational training program includes training in one or more of the following areas:

1. Automotive
2. Clerical
3. Culinary
4. Conservation
5. Conservation
6. Maintenance
7. Medical

Facilities, work opportunities, and available personnel determine how many courses in which areas will be offered at any given center.

Entry-level vocational training objectives are developed to provide knowledge and practice with the following:

1. Interpersonal, educational, and training requirements of a given occupational area
2. Safety requirements of a given occupation
3. Tools and equipment required for a given occupation
4. Opportunities for advanced vocational training
5. Basic tasks related to a given occupation

Special vocational training courses designed to train corpsmen beyond the entry level are offered in the following areas in some centers:

1. Air conditioning and heating repairman
2. Appliance repairman
3. Business machine repair
4. Small engine repair
5. Welding and metal fabrication
6. Marine or boat maintenance
7. Offset printing

The work-education program takes advantage of a wide variety of conservation work projects and logistical operations in centers to give an on-the-job setting for corpsmen to practice what they have learned and to learn from their work. All entry-level vocational training curricula are closely integrated with the work-education program.

Driver Education. All Job Corpsmen are eligible to receive instruction in the operation of motor vehicles. A minimum of 40 hours of classroom training and eight hours of behind-the-wheel training are provided to qualify trainees for state and federal licenses and to develop a pool of skilled drivers to operate the center's automotive fleet.

Refresher courses are provided for corpsmen who already have valid state licenses. Advanced instruction is offered to corpsmen who complete the basic course and are interested in driving light trucks or delivery vehicles.

Training equipment includes dual-control cars provided by local dealers and trucks and buses used in center operation.

Counseling and Guidance. The conservation center counseling and guidance program provides the following for the Job Corpsmen:

1. Specialized personal and vocational counseling by a professional counselor
2. Guided group discussions to find solutions for common problems
3. A corpsman advisor who insures constant attention to and awareness of each corpsmen's problems and progress

Because Job Corps is a residential program, there is constant and continual interaction between staff and trainees. All staff members become involved in counseling activities, and it is likely that each will be able to assist corpsmen with particular problems. Coordination is achieved through the professional counselor.

Physical Development and Recreation. The Job Corps physical development and recreation program provides a wide range of formal and informal activities to improve physical fitness, to provide for immediate recreational needs, and to instruct corpsmen in profitable and enjoyable methods of spending their leisure time.

Leading to full community participation, the scheme of development for each corpsman begins with a basic program of physical education and proceeds through instruction toward skill in chosen sports and recreational activities.

Activities vary according to center location but include circuit-interval training, intramural and extramural sports, fitness testing, outward bound training, safety and first aid, arts, crafts, hobbies, outdoor skills, drama, music, movies, TV, and social and community recreation.

Corpsman Advisory System. How can all of the preceeding sections be evaluated and how can a corpsman be apprised of his progress. The corps advisory system accomplishes both and also serves as a motivational tool. The fact that the corpsman is competing only with himself at his own pace is constantly emphasized. The use of large segments of programed materials reinforces this.

Upon arrival at a center, each corpsman is assigned a staff advisor who explains the opportunities available and familiarizes the newcomer with center operations. The trainee and his advisor then work together to assess the corpsman's current skills, to clarify his training goals, and to choose a specific training plan to achieve them.

Throughout the corpsman's stay at a conservation center his advisor monitors his progress in education, personal development, and work performance. As the trainee reaches specified milestones in these three areas, he becomes eligible for promotions, pay increases, and expanded sponsibilities within Job Corps. Regular meetings with the staff advisor are scheduled to review the corpsman's progress toward the occupational and educational goals which he has set for himself.

Program Outcomes

After a civilian conservation center corpsman has reached the completion point in the educational system described and will not benefit from a longer stay in the center, a decision is made by and with the corpsman as to whether he wishes to transfer to a large urban center where he can learn more sophisticated job skills and raise his education level further or be graduated and placed immediately.

Since there is only one type of women's center, corpswomen will remain in the center until placement.

Measuring the effectiveness of the program is a very difficult task. Failure to remain in the program until completion can be recorded as a negative statistic. I do not really believe that this practice provides either a fair or accurate evaluation of program success. On the other hand, immediate placement does not really spell success. In reality, the measure of success must be of a long-term nature. Studies of this type are underway, but results will not be available until late 1969.

To give some indication of what has happened to the first 110,000 youths who were trained by Job Corps, the following information is presented: Job Corps has trained 109,610 youths as of October 1, 1967. Seventy percent or 76,301 are in the following categories:

Jobs	59,515	(78%)
Military	7,630	(10%)
School	9,156	(12%)

These youths obtained better jobs with higher skills and better wages—$1.70 per hour vs. $1.19 previously.

Dissemination of Job Corps Methods and Materials

The fact that the cost of a program like Job Corps could prevent expanding it to meet the needs of all dropouts was apparent from the start. Therefore, a thread has been woven through the Job Corps fabric which provides for the dissemination of successful methods and materials to the educational institutions of the nation. In fact, the 1967 amendment to the Economic Opportunity Act specifically charged the Job Corps with this task.

Job Corps has worked with professional organizations, colleges, and universities, and public school systems for the past three years. Specific projects include the following:

1. *Project Interchange*

Through the National Education Association (NEA) and in cooperation with the school systems of Washington, D.C.; Detroit, Michigan; Simi Valley, California; and Seattle, Washington, teams of teachers spent one year working in Job Corps centers and have now returned to their school districts where various projects using corps methods and materials are underway. Seattle, in particular, has established an educational employment center for dropouts and potential dropouts. This program virtually replicates the Job Corps conservation center educational system. Plans are underway to expand this unit to a capacity of 350 students next school year.

2. *Internship and Work-Study Programs*

By means of funded internship and work-study programs, several hundred college students, most of whom are from teacher-training institutions, have been able to work extensively in Job Corps centers.

3. *Project Impact*

Eleven public school systems have 17 teachers now working at Job Corps centers. These teachers are on one-year leaves of absences from their schools. This contract is in cooperation with the NEA.

4. *Project 100*

During this coming summer, 100 teachers from school systems throughout the nation will work for eight weeks in Job Corps centers. They will be trained in the Job Corps system, and a follow-up conference will be held in the fall to compare notes and experiences.

5. *American Association of Colleges for Teacher Education* (AACTE) *Intern Project*

During the school year of 1968-69, six more colleges and universities, in cooperation with the AACTE, will provide student teacher interns to Job Corps centers. Thus, approximately 300 fledgling teachers will have participated in the Job Corps program.

6. *National Association for Secondary School Principals* (NASSP) *Materials Dissemination Project*

In cooperation with the NASSP, 25 public school systems received complete sets of corps-developed instructional materials. Teachers from the systems were trained in the use of the materials. Most of the projects now underway are due for expansion in 1968-69.

Over 2,000 school systems have purchased and are using in their classrooms corps-developed materials. Requests for information regarding the purchase and availability of these materials continue to flow into Job Corps Headquarters.

It is our fondest hope that all of what we have learned in Job Corps, including what to do and what not to do for disadvantaged youth, will be researched, validated, and transmitted to the public schools of America. We have a living laboratory of some 35,000 deprived youth in a controlled environment in our centers. The opportunities that this condition presents for learning about this population are virtually endless. We strongly urge the educational community to take advantage of this situation.

Summary

The Job Corps can be classified as one of the largest federally operated adult basic education programs. Its immediate success is evident. Only time can tell the long-range effect that the program has had on enrollees. Great quantities of materials, particularly in the reading field, have been developed for the program and are readily available to educational institutions.

We feel that we have some of the answers to the development of educational programs for the poor. We are seeking many other programs. We welcome and appreciate outside interest and participation in this quest.

The Reading Program—Civilian Conservation Centers

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Job Corps, Washington, D.C.

Job Corps has been identified as a total program of human renewal. The target population consists of young men and women who have spent their formative years in social, educational, and economic deprivation. The profile of Job Corps enrollees presents a picture that still shocks, even though more people are becoming forcibly aware of the ravages of poverty.

Eighty percent of all enrollees had not seen a doctor or dentist in the ten years previous to their Job Corps experience. Although they had attended school for almost nine years, the median reading level of entering corpsmen was less than the fifth grade. Almost half of the corpsmen who entered conservation centers read below a third grade level. Over sixty percent of Job Corps members came from broken homes. The same percentage came from homes where the head of the household was unemployed. Sixty-four percent of the total population were "force-outs" from the last school attended. They were asked to leave by school authorities.

While one could add to this description of the youthful poor in America, the above facts and their implications give a picture of the young men and women who turn to Job Corps as a last resort. They come to Job Corps seeking an alternative to the poverty, illiteracy, unemployment, and welfare to which they have been exposed.

To accomplish the goal of human renewal, Job Corps must provide a program that will be broad enough to remediate the deficiencies caused by the corps member's previous history of deprivation. It must be a program capable of doing many things in educational, social, and vocational areas. However, this paper will focus only upon one aspect of Job Corps training: the reading program.

Organizationally, Job Corps has three types of centers: men's urban centers, women's urban centers, and civilian conservation centers. Both the men's and women's urban centers are contractor operated. At these centers, programs are developed and implemented by contractor personnel. Each center has developed a unique reading program, and it would be difficult to discuss these programs except in the most general way. On the other hand, the civilian conservation centers, administered by the departments of agriculture and interior, all have a uniform reading program which was developed by Job Corps headquarters personnel in Washington. It is this reading program that will be discussed in this paper.

Conservation centers are located in rural areas on federal lands. These centers work with male Job Corpsmen who possess minimal reading skills. Enrollees with reading skills above the fifth grade levels are assigned to urban centers, where the programs place heavier stress upon vocational training. Conservation centers emphasize basic education training and the development of appropriate social skills and work habits. In size they range from 100 to 200 corpsmen.

One special aspect of the conservation center program is the work program. By congressional mandate, approximately half the time of conservation center corpsmen must be devoted to conservation-type work designed to improve the public lands.

Another feature of Job Corps which is not widely understood is the completely voluntary nature of the program. Corpsmen may, and do, enter or leave the program at any time. Hopefully, enrollees will stay long enough to complete a meaningful training program. However, there is no mandatory enlistment period. While in the Job Corps' earlier days, retention of trainees was a significant problem, the retention rate of centers has improved dramatically; and, as of this writing, the majority of enrollees leave classified as category I's, which is simply Job Corps jargon for a trainee who completes a vocational training program that makes him capable of employment. Obviously the conservation work requirement and the random trainee-entry-aspect program place constraints upon the ultimate design of the reading curriculum. So does the learner, also.

At each conservation center there are some corpsmen who read reasonably well—up to about a fifth grade level. There are corpsmen who cannot read at all and who do not even know the names of all the letters of the alphabet. There are corpsmen who learn readily and those who do not. There are corpsmen who are eager to learn and corpsmen who are not. Any reading program which hopes for at least a minimal chance of success must take into account all of these conditions.

The Reading Program

In 1964, a task force headed by Douglas Porter of Harvard University designed a program to function under the rigorous conditions imposed by the Job Corps environment and the nature of the target population. According to Porter, the program did not reflect any particular theory of the teaching of reading. It was assumed that there were many ways to teach reading, and the program concentrated on using the best instructional materials available.

The materials were systematized or structured so that trainees at all reading levels could be accommodated. The system was also designed to enable the instructor to devote his effort to real teaching, as opposed to struggling with the ambiguous instructional procedures that characterize too many basic education programs. The program resulting from Porter's efforts provided for the application of an appropriate activity at the most opportune time for the learner. It also allowed immediate evaluation of this performance and the capability for quick- and easy-learner movement. It was a completely individualized program that was as self-instructional as possible.

In order for the program to succeed, it was necessary to place the responsibility for learning on the trainee as well as on the teacher. While this is hardly a revolutionary idea, it is something that is rarely practiced. However, the Job Corps reading program absolutely cannot function well unless the teacher is willing to share this responsibility with those being taught.

Another important aspect of the program was that it was designed for individual rather than group instruction. Here is another indication that the traditional role of the teacher must change, if this program is to succeed.

Program Elements

The program as developed by Porter and his group consisted of the following elements:

1. A series of placement tests designed to determine the optimum starting place of the trainee in the program.
2. A set of self-instructional, programed materials, designed for corpsmen deficient in basic reading skills (roughly below the third grade level as measured by standardized reading tests). Success in these exercises lead directly into the graded reading selections.
3. A set of graded reading selections materials (about 2,000), carefully identified by reading level and story content, designed

to meet the interest and abilities of a wide range of corpsmen.

4. Self-administering comprehension checks designed to allow both trainee and instructor to determine progress at short, regular intervals.
5. A library collection of recreational and vocational reading matter.
6. A fervent prayer that there would be instructors with the talent and willingness to make the program work.

While experience has caused new elements to be introduced and certain procedures to be modified, the program still operates essentially in the following way. When a trainee arrives at a center, he is immediately given a brief 13-minute reading placement test. The results of this test give an approximate indication of his reading ability. On the basis of this test, he is placed into one of several other screening tests that are more finely grained with regard to their placement ability. After these second placement tests, the corpsman is placed into a specific level in the reading program. The corpsman then progresses through the program as rapidly as his interest and ability permit.

The heart of the program originally consisted of over 2,000 graded reading selections that ranged in difficulty from about third through seventh grade. Corpsmen who read below the third grade level are placed into the programed materials section until their skills increase to the point that work in the graded reading materials could be successful. Trainees who read reasonably well—above the seventh grade level—are placed in commercially available self-instructional materials appropriate to their abilities.

The selections for the graded reading series were chosen after careful screening of all available materials that appeared appropriate in terms of interest for this population. Materials from many sources were utilized. In general, materials were selected that were relatively brief and interesting and whose content related to the experiences that Corpsmen had prior to their coming into Job Corps. The items were on a wide variety of topics, consisting of short and medium-length stories, essays, and articles. Each selection was assigned a reading level by application of the Powers and Ross adaptation of the revised Farr-Jenkins-Paterson readability formula. Publishers' estimates of the reading difficulty of their materials were not utilized.

The Materials were grouped into nine different levels, each level roughly representing half a grade. Grade equivalents were not used in discussing the reading program with the trainees. In addition to being classified according to difficulty, the materials were classified according to interest topics, such as, sports, jobs, hobbies, space age, and wild west.

Information concerning the difficulty level, topic, and directions as to where the material could be located are found on the master index list. After a corpsman has been told his reading level, he is free to select any graded reading selection he wishes by consulting the master index list. He simply searches through the titles at his specific reading level until he finds a story he thinks he would like to read.

Each selection has a short comprehension check following it. The corpsman, after taking the test, secures the answer key and marks it himself. In addition, each trainee maintains his own records, concerning selections read and scores received in the comprehension check. The instructor personally administers each fifth comprehension check and checks the corpsman's performance in oral reading.

New Materials and Techniques

It soon became apparent after the program was in operation that the graded reading selections did not have a sufficient variety of items appealing to corpsmen. Since the commercially available offerings had already been carefully screened by the task force and all acceptable materials had been used, it was decided to develop an additional 300 graded reading selections specifically for Job Corps' needs. Accordingly, various publishers were asked to bid on a contract for that purpose. In this request for bids, it was specified that one third of the materials would refer to projects planned for conservation centers and the specific skills involved in those projects; one third would cover related facts of national history, geology, botany, zoology, and weather; and one third would cover such occupational skills as welder, carpenter, telephone repairman, and electrician.

It was also stipulated that the difficulty levels would correspond to the levels utilized by Job Corps. The actual materials developed as a result of this contract were incorporated into the existing graded reading selections.

The materials developed under this contract are characterized by masculine tone and content, straight-forward story lines, and utilization of interest-catching titles, illustrations, and lead paragraphs. The lower-level materials are of a more general nature, requiring less background and experience than the higher-level selections. The lower materials also tend to glamorize the working world, whereas the upper-level materials are more factual and realistic. These new materials were well received by both corpsmen and instructors and quickly became widely used in the reading system.

The developer of these reading selections was permitted to market the materials commercially. It is highly significant that within a year of publication over 2,000 school systems purchased these materials for use in their remedial reading programs.

In addition to new materials, experience also pointed out the need for the introduction of new techniques. Instructors voiced complaints about the effectiveness of the placement procedures. Accordingly, informal reading assessment techniques became part of the placement procedures. After paper and pencil tests indicated the specific placement levels, these placements were confirmed by the use of an informal reading inventory utilizing the graded reading selections. This procedure simply meant that a teacher would confirm a placement by listening to oral reading of several passages by the trainee at the level to which he was assigned. While there are no data to confirm that placement was made more efficient, instructors were given more confidence in the system.

Conversely, instructors voiced concern because the method for determining progression from one level to the next was heavily reliant upon teacher judgment. In this case, Job Corps instructors requested a more objective technique. To meet this need, level advancement-checks were introduced into the system. These were a series of comprehension tests that were administered at certain key points in the program to determine if a corpsman was ready to advance to the next level.

In 1966, after two years of operation, the character of the population began to change. The reading levels of entering corpsmen began to decline drastically. Where in the beginning of the program less than 30 percent of the corpsmen entered below third grade level, by 1966 40 percent of the corpsmen were entering at this level of skill development. Information from the field indicated that there was not a sufficient range of reading materials at the lowest Job Corps reading levels. A search of existing materials that had been produced since the Job Corps reading program was originally developed showed that nothing else had come on the market that would suit the requirements.

A decision to start a new developmental effort was made. A request for proposals was circulated among developers of educational materials to obtain 100 graded reading selections at Job Corps levels one and two (roughly the third-to-fourth grade level of difficulty). In this request it was stipulated that the materials were to be original and written specifically for Job Corps.

The contractor to whom the bid was awarded determined the topics to be covered in the new graded reading selections by conducting a survey of corpsmen to determine what they would really like to read. In this contract, no prior restriction was placed on the topic coverage. Titles were to be determined by interest.

In order to determine the interests of corpsmen, a questionnaire containing 200 suggested titles along with a brief story line was submitted to over 400 corpsmen at various Job Corps centers. The questionnaire was printed in three different forms: one alphabetical and two randomly ordered. The corpsmen completed the questionnaire by selecting three to five of ten titles printed on each page. For corpsmen who could not read well enough to complete the questionnaire themselves, the titles and storylines were read to them by the researcher.

From this survey, 86 titles clearly emerged as the most popular in corpsmen preference. The remaining fourteen titles were selected arbitrarily from the list on the basis of programatic tie-in since corpsmen's interest preference was widely scattered after their first 86 choices. The interest inventory indicated that corpsmen liked to read about cars, health, and events related to personal experience. For example, some of the most popular titles were *Body Building at the Dinner Table, Are You Drown Proof?, The Deadly Cigarette, Is Your Car Safe?, Can You Spot the Makes of Cars?, Cross-Country Driver, A Job in the Military,* and *They Know If You've Been Drinking.*

When these materials were completed and introduced into the reading system, they were well received by both trainees and instructors.

These materials were also made available to the public schools through a commercial publisher, and in the first seven months after the materials had been released, over 1,000 school systems were using them in their reading programs. Publishers who have been searching for new markets might well take note of this need and acceptance for high interest materials, written at relatively low reading levels.

The Reading Instructor

The Job Corps' "system" approach to the teaching of reading does change the traditional role of the teacher. From a group-oriented type of instructional situation, where the usual teacher task is to work with relatively large numbers at one time, the instructor is now free to work on a consultant basis with individual students as the need arises. If the instructor allows a large burden of the instructional task to fall on the learner, that instructor is free to devote his time to what is the most important part of his job—teaching. And it is possible to conduct this teaching in the best of all possible teaching worlds—on a one-to-one basis.

This is not to say that grouping never takes place. If, for instance, a group of five or six trainees need work in a specific area, then it would be nonsense and inefficiency not to group. Job Corps instructors are encouraged to group when appropriate.

The writer would like to be able to report that instructors immediately saw the tremendous advantages that such an instructional system presented to them and that they were delighted with the freedom from the clerical detail and group drill work. But this was not the case. Initial reaction on the part of many instructors to this system, which was different from the school classroom from which they came, was not positive. Many teachers were reluctant to accept the role of consultant, refused to permit corpsmen to maintain their own records and score many of their tests, and refused to use corpsmen as teacher's aides. Teachers obviously felt more secure in a group-teaching situation. As a matter of fact, some teachers appeared to utilize the major record-keeping tasks that such a system demands as an excuse to avoid contact with trainees. In other words, rather than allowing corpsmen to maintain their own records, these teachers devoted the bulk of their teaching day to this task.

The writer would like to point out, in case there is any doubt, that no matter how carefully a learning system is engineered, the system has little or no chance of success if the teachers who have to implement the program are reluctant or opposed to it.

However, most Job Corps teachers did not share this attitude. In talking with teachers in the earlier days of the program, it was the writer's perception that older, more experienced teachers were more receptive to the program and saw its advantages. The younger teachers with little or no experience appeared to be much more rigid and more likely to want to teach in more traditional group-oriented ways.

Teacher Training

Regardless of the reasons for this teacher attitude, it did exist; and steps had to be taken to mitigate it. There had always been preservice training for instructors prior to their center assignment. Since this training in itself proved inadequate because of its generality, it was decided to add on-site assistance. A team of consultants was assembled to visit centers and provide classroom training for the instructional staff. These consultants, in addition to visiting centers on a regularly scheduled basis, are available on a request basis. If a center acquires new staff members who require immediate training, a consultant can be dispatched for this purpose.

In addition to this type of training, regional workshops are also held on a scheduled basis. These workshops concentrate on a specific training area—reading, mathematics, or world of work. Besides training staff in a particular area, these workshops are extremely valuable in providing a vehicle for an interchange of ideas among various instructors. Such workshops have probably been the most potent force in changing attitudes of teachers who had rejected a structured-systems approach.

The writer has found that many teachers reject this approach primarily because they don't understand it. In the workshop, these teachers meet other teachers who used the system, found it useful, and in many cases, were enthusiastic about it. Reluctant teachers may reject expert advice, but they find it difficult to reject the experiences of their fellow teachers.

Another training device that has been used successfully is the institute approach. Each summer, Stanford University conducts one-week institutes in reading for reading teachers from each Job Corps center. In addition to covering the basic details of the reading program, a broader view of the skills involved in teaching of reading is presented to staff members. This institute has also proved to be successful in gaining further acceptance of the individualized, self-instructional concept, probably for the same reason that made workshops successful in this regard: the opportunity to work with teachers who successfully mastered this technique.

The writer does not want to give the impression that all Job Corps instructors have gleefully accepted this approach to the teaching of reading, but he thinks the majority have. However, it is an area that still requires constant attention and effort since many teachers do return to public schools and there is always work with new instructors.

Results of the Program

Because of the nature of the Job Corps program, it is relatively easy to keep track of the progress of trainees. Figures are maintained by individual centers and nationally at Job Corps Headquarters. As might be expected, center gains vary considerably. On the basis of these data, corpsmen at conservation centers show an average reading gain of one year in six months' time.

One doesn't like to make too much of these figures since they are dependent upon accurate reporting by centers, all of which have a vested interest in the results. However, these data, along with other information, give one sufficient confidence to state that the Job Corps is successfully teaching reading to a population that has been subjected to some devastating learning experiences prior to Job Corps and that has an earlier history of little reading achievement.

While all of the preceding matter is hopefully of some interest, a fair question at this point might well be, "What has been learned from Job Corps?"

First, it has been demonstrated fairly conclusively that Job Corps' target population—the school dropout, or force-out—can learn to read. This is not a unique assertion, but where else has such work been done on as large a scale.

Second, one has demonstrated that it is possible to mount a large-scale remedial program even with relatively untrained instructors. The writer thinks he understands the problems of many urban school systems, and he thinks that they are more than replicated by Job Corps. Job Corps has more than 90 centers scattered throughout the country. They are operated by several bureaus of two different agencies. Logistics are handled by still a third agency. If one has set out to devise a more complicated way of operating an educational program, he would be hard-put to improve upon the complexity of the Job Corps system. Nevertheless, Job Corps has apparently come up with a workable program under these conditions.

Third, and perhaps most important, Job Corps is training a cadre of teachers who have become skilled in working with an educationally deprived population by using some unusual techniques. Many of these teachers will return to the public schools to use their Job Corps experience in their classes.

In OEO's latest legislation, Congress gave Job Corps a mandate to disseminate to the general public the techniques and materials developed. To that end, Job Corps made arrangements with 21 urban school districts, the Department of Defense, Project New Start in Canada, and several Community Action programs to use the Job Corps-developed reading program on a pilot basis. All teachers who were to participate in the program attended a week's training session at Stanford. In addition, on-site assistance was provided to those who requested it. Data on the results of these programs are not anticipated until June. However, informal reaction received so far has indicated good-to-excellent results in the majority of places where the program is in operation.

The Air Force has made a report on the use of the reading program at its Lackland Basic Military Training Center. In a report on the program up to January 1, 1968, that center placed 82 airmen in the program. As measured by the USAFI II test, these airmen showed an average gain of 1.94 years in 110 hours of instruction.

Evaluation

In a paper of this type, the program described tends to acquire a portion of perfection. The writer would like to avoid this implication. The Job Corps program, like all programs, has its strengths and weaknesses. For instance, the tests used to determine advancement from one level to another vary widely in quality and still must be classified as informal tests. One hopes shortly to determine the validity and reliability of these instruments and replace the less efficient ones.

The readability formula used possesses all the weaknesses of such formulas for determining difficulty levels. The writer is not certain that the state of art in this area will permit one to do better than to acquaint the staff with the weaknesses of readability levels. Too many people consider a readability level as an absolute, rather than a relative, value.

The materials that are used in the beginning reading portion of the program, while effective, have a juvenile format which has not proved a barrier to learning. Job Corps has found that its trainees do not suffer embarrassment nor do they reject the materials. A number of programs were examined prior to selecting this particular set of materials, but the overall superiority of this program outweighed the disadvantages of its format—hence, its inclusion in the Job Corps program.

However, one must point out that one is able to use such materials successfully in the Job Corps because one carefully controls the learning environment. In a less structured situation, it might be wiser to select a less effective program but one that has a more appealing format for the older learner.

Another area of concern in the program is the teacher's manual that has been developed. While it is almost axiomatic that teachers' manuals will be dull and complex, the writer thinks that the Job Corps has reached new depths with its manual. A complex learning system is unquestionably difficult to explain with clarity. Job Corps however, has been accused of making the difficult impossible.

A series of training films, which one hopes will help in communicating with teachers, is currently being developed.

The writer would again like to make clear that he is not suggesting that Job Corps has come up with the definitive answer to teaching remedial reading. He is aware, and the reader is also, of many individual programs that are not only sophisticated in their approaches to this problem but are more efficient in producing reading gains. However, he is not aware of any large-scale remedial reading program that has approached Job Corps in its effectiveness. If one has done anything in Job Corps, perhaps one has demonstrated to large school systems that it is possible to mount a massive remedial program with older learners with a good measure of hope of achieving success.

The Detroit Urban Adult Institute

JOSEPH C. PAIGE
Detroit Urban Adult Education Institute

The major initial goal of the Urban Adult Education Institute, an educational research facility of the Detroit Public Schools and Wayne State University, is to identify ways to broaden and increase educational and employment opportunities for uneducated and undereducated adults through multimedia approaches, using the latest in educational technology, including programed instruction and other forms of self-directed learning experience.

All UAEI programs follow the guidelines of the educational sciences. The educational sciences provide the means whereby educational purpose can be clarified, consistent interpretations of data can be realized, and the reliability and validity of predictions and generalizations can be determined.

Evaluation of the Program

The experience at the Urban Adult Education Institute, following the guidelines of the educational sciences in the design of instructional strategies for teaching 250 undereducated adults, as well as for inservice training of 10 teachers, demonstrated the viability of this innovative approach. For example, upon completion of 90 hours of instruction

1. More than 80 percent of the students showed a grade level achievement of from one to four years (as measured by the ABLE Test and the California Achievement Tests).
2. The average absentee rate of 30 percent of the students was reduced from one day per week in October to one day per month in February.
3. The degree of tardiness of 70 percent of the students was reduced from an average of 30 to 40 minutes in October to 5 to 10 minutes in February 1968.
4. One hundred five students had been successfully enrolled in new careers and subprofessional training programs.
5. Ten students were able to hold jobs for more than one month for the first time in five or more years.
6. Five students were successfully placed on jobs for the first time in ten or more years.

7. Twenty-five students had reduced the average of recorded profane words used in ordinary conversation per class session from 20 in October 1967 to three in February 1968.

8. Twenty mothers admitted that they now take daily baths for the first time in 10 or more years.

9. Thirty of the 180 female participants in the program admitted that they used commercial sanitary napkins for the first time, after enrolling in UAEI programs.

10. Five of 15 women who were overweight at the time of enrollment, admitted that they had lost from 10 to 15 pounds, as a result of knowledge gained about dieting and health.

11. Fifty of the female and 20 of the male enrollees attended one or more PTA meetings at schools where their children were enrolled, as a result of a new awareness and insight developed in UAEI classes.

12. Forty female and 17 male enrollees joined neighborhood block clubs for the first time.

13. Five male and 16 female unemployed enrollees estimated that they had reduced their daily alcohol intake (wine and whiskey) by at least one-third (from an estimated "pint" per day in October); two females and one male stated that they now have only occasional beers (one to two per day).

Future Objectives

Funds to expand the effort have been requested. The major objective of the expanded effort is to involve a minimum of 7,000 hard-core, undereducated unemployed or underemployed urban residents of Detroit and surrounding communities in a massive education-tutorial program, following the guidelines of the educational sciences. The adult basic education program will be coupled with an intensive job-placement program for at least 5,000 of the 7,000 participants initiated to bridge the gap between training and employment. This aspect of the proposed program will be developed in cooperation with state and city agencies, industry, and local service organizations.

To accomplish goals, the institute is testing a variey of "grass roots" approaches for the effective involvement of adults as individuals and as families in their homes and neighborhoods. Such basic adult education programs as basic preparation in communication skills, computational skills, teaching "coping" strategies for the worlds of life and of work, citizenship education, consumer education, and various forms of job-related programs are being developed, tying innovative techniques to the needs of people in the community.

Performance Goals. Since one of the major purposes of all of the experimental UAEI efforts is to research a variety of approaches to teaching and working with undereducated adults, helping to enhance their self-dignity, and the developing of coping skills, upon completion of any of the UAEI programs, a student should have mastered basic day-to-day coping strategies, developed a positive self-image, and acquired basic competency (at least at the eighth grade level) in basic communications and computational areas, citizenship, and consumer education.

In the area of *academics, personal and family,* upon completion of the programs, the student should have

1. Progressed from two to five grade levels as measured by the ABLE Test and the California Achievement Tests.
2. Increased his image of self, positively, as evidenced by attendance, decrease in tardiness, dress, reduced use of profanity, general grammar, observable hygiene practices, respect for self and others, and participating in neighborhood and community activities.
3. Gained positive insights as pertains to the desirability of maintaining wholesome family relations, as evidenced by observable behavior with respect to spouse whether legal or common law, children, parents, and relatives.

In the area of *research,* upon completion of the programs, one should have

1. Developed, refined, and assessed the effectiveness of some new and innovative instructional materials and programs for adults in a variety of environmental settings.
2. Identified and defined some behavioral changes to be effected in the undereducated adult learner in the cognitive, affective, and psychomotor domains in such areas as reading, communication, job skills, home and family life, citizenship, consumer education, arithmetic, and various subareas of the social sciences.
3. Identified some specific behavioral changes considered desirable for proper articulation and assimilation of the educationally disadvantaged into the mainstream of human activities.
4. Developed a framework for the organization of significant learning experiences for adults in sequential and interrelated patterns.

In the area of *employment* one should have

1. Developed and tested a variety of programs and approaches for the recruitment, training, and securing of permanent employment for the undereducated adults.
2. Identified organizations in the areas that are involved in cooperative programs aimed at job placement, job training, job upgrading, and job retraining.
3. Identified manpower resources that exist in the community and related these to existing and potential job openings, including the development of training programs involving these job needs using a variety of approaches.

Within the first two months of the six-month educational cycle, potential employers should be identified for at least 1,000 of the 7,000 student target population.

Upon completion of both six-month educational cycles, potential jobs should have been identified and referrals made by job title, agency, and salary for at least 80 percent of those completing the training cycles.

Upon completion of both of the six-month educational cycles 5,000 of the 7,000 participants, more than 70 percent, should be gainfully and meaningfully employed in permanent or quasi-permanent positions.

In the area of *community involvement* one should have

1. Developed and tested a variety of programs and approaches to encourage the effective involvement of adults at all levels in local community, city, state, and national affairs.
2. Developed activities involving the total community as part of the adult education program commitment of UAEI, through the use of facilities and programs geared to community needs.
3. Developed interest, awareness, a feeling of personal worth, and a sense of community involvement in the adult learner.
4. Developed joint community and school action programs.

Upon completion of a six-month educational cycle, 60 percent of the students completing the cycle will show positive gains with respect to awareness, interest, understanding, and appreciation of community problems and responsible citizenry as evidenced by

1. Increased involvement in community activity.
2. Registering to vote.
3. Active participation in city, state, and federal elections, as appropriate.
4. Active membership in neighborhood social, political, and community action groups.
5. Assumption of leadership roles in organization by at least 20 percent of the participants.

In the area of *systems analysis,* upon completion of the project, one should have

1. Systematized and organized research materials in order to provide consistent interpretation of data and assure validity and reliability in predictions and generalizations.
2. Provided guidelines and instrumentation for institutional programing, career growth, and professional evaluation.
3. Identified existing instrumentation or created instruments to meet program needs in the areas of evaluation, behavioral changes, and the organization of learning experiences.

In the area of *personnel training* one should

1. Show evidence, as measured by teacher constructed tests and assessment of practicums, of an understanding of the nature of problems and needs of undereducated adults.
2. Be able to effectively design and implement instructional strategies for undereducated adults involving innovative practices and new technology as demonstrated in practicums.

3. Be able to effectively use video tape recorders, tape recorders, transparencies, EDL equipment, EDEX System, computer assorted instruction, and various programed instructional materials in their classes.

During 1968-1969, 800 teachers of undereducated adults in Wayne, Macomb, and Oakland Counties and at the Jackson State Prison will participate in a 45-hour special inservice program consisting of classroom instruction and practicums.

Individualizing Instruction in Adult Basic Education Programs

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GARRETT MURPHY
Albany, New York, Adult Basic Education Program

In the spring of 1966, when hopes raised by the passage of E.S.E.A. were being mingled with optimistic reports of the success of Head Start, an eminent local Negro leader confided that he had already given up on the present disadvantaged generation. In his view, the path to social and economic equality would have to be found early in life and lead through a program of preschool and compensatory education.

Two years later a high school principal, appearing on a national television commentary about the recent report of the President's Riot Commission, told of his experiences in compensatory education. After two years operating a junior high school in Detroit into which an excess of $1,000,000 per year had been invested in compensatory programs, this principal called compensatory education a "limited" success. The limits were those imposed by home life and general environmental conditions. Without improvement of these conditions, further expenditures for compensatory-education programs would show an ever-decreasing yield. To this statement one can only state a strongly held belief: there is no way to write off one generation and save the next.

The major theme of this paper is concerned with methods and materials employed to teach reading to undereducated adults. Methods and materials are implementations of program needs. The rationale behind the selection of the methods and materials can best be explained by a very brief overview of the Albany adult basic education program.

The adult basic education program is not primarily a cultural endeavor wherein one attempts by instruction alone to modify the quality of ghetto life. One *is* concerned with problems of ghetto existence. One *does* teach practical government, health, nutrition, disease prevention, family life education, and consumer protection along with basic communication and computation skills. But one is guarded in his hopes that educational evangelism alone will bring about a major contribution to altering the life styles of the socially disadvantaged. Some students bring with them sufficient intrinsic motivation to persist until their personal goals are met. For most of these students, however, some outside force is needed to spur them on to remaining in the program until a significant amount of learning has taken place. In the majority of cases, the spur is employment. By raising the level of competence in basic skills one can help students obtain jobs, job-training programs, or promotions for which they would otherwise be unqualified.

Individual Learning Needs

In any adult basic education program one is likely to find a great deal of individualized instruction. The composition of the student body demands such instruction. Unlike elementary or secondary school, students in adult basic education programs rarely have had any prior common educational experience. In each class, some are new arrivals placed there by initial testing while others may have been promoted from the preceding level. Two persons new to the program can show greatly disparate error patterns on their initial tests and yet receive the same gross score and be placed in the same class level. Furthermore, rates of progress are, of course, highly individualistic.

Given an adult basic education program which is strongly oriented to employment upgrading, the necessity for individualization is further heightened. Students must be prepared to move to jobs or training programs as these opportunities arise. It is often necessary to provide certain students in each cycle with concentrated instruction leading to early completion of the program while providing others instruction in a specific subject area beyond normal term boundaries. Some successfully placed students elect to continue a diminished adult basic education program concurrently with the new job or training course. Their programs must be altered to fit their new schedules.

Individual accommodations, such as those described, are impossible to affect within the confines of a conventional program specifying a fixed number of student hours per week. In a program such as Albany's, the nongraded approach, advocated by so many educators as an academic ideal, gradually becomes a work-a-day necessity.

Of all subjects taught in adult basic education, none is more amenable to a substantially self-directed program than reading. The axiom that one learns to read by reading is certainly borne out by almost four years of work with undereducated adults. This is not to say that there is no room for teacher direction or structuring of the material to be read. The teacher must constantly evaluate progress and select appropriate new materials. The text may require structuring to induce generalizations in the skills, or vocabulary development. But the momentum which results from an individualized, partially self-directed reading program subordinates all other factors.

The need for an individualized program has already been established, and its extrinsic advantages have been indicated. This mode of instruction, however, is not without its problems. Individualized work is very quiet work. A totally individualized program can have a built-in pall level in the same manner as does programing. In order to construct both a total adult basic education program and a reading program which are at once individualized and lively, it is necessary to examine conventional instructional programs. What is the normal pattern of instruction?

All subjects in a conventional instructional program, the discrete and the sequential, normally follow this pattern: a period characterized by much oral expression with much pupil-teacher interaction, followed by a period characterized by silence and concentration as students work at applying new learnings. Apostles of individualization and programed instruction condemn the "lockstep" character of conventional instruction whereby all students are expected to learn each concept at a given rate. But in attempting to set up individualized programs with considerable amounts of programed instruction educators have run straight into the "pall-level" problem. The effect of individualized programs has often been the abandonment of group teacher-student interaction periods in favor of individual conferences. The atmosphere becomes one of silence and loneliness as students ply their own courses with only occasional professional guidance. The excitement, the interaction, the opportunity to satisfy vanity by impressing teacher and peers (activities which are very important to some students), all of which are part of the conventional program's first phase, are not possible in a totally individualized program. The result is that an individualized instructional program *can* be a very dull program.

Obviously, some way must be found to incorporate the lively aspects of a coventional program with the pertinence of an individualized program.

The key to unlocking this problem lies in the consideration of the two different types of subject matter in an adult basic education program—the sequential and the discrete. The latter category takes in most of the practical government, health and nutrition, and consumer education lessons as well as that part of the English and reading curriculum dealing with appreciation. Seminars dealing with these discrete topics can be interspersed with small-group and individualized sessions dealing with the more sequential topics of reading comprehension, mathematics, and grammar. In this way the advantages of the interaction-then-concentration pattern of conventional instruction are retained while individual differences in rate of learning and degree of preparation are accommodated by individualization of sequential topics.

Diagnostic Teaching

In the instructional scheme just described, reading is listed as mainly belonging to the sequential group of subjects. A different reading program must, therefore, be adapted to each student. The first step in this process is diagnosis.

Each student registering for adult basic education in New York State must take initial tests required by regulations of the state education department. These tests are usually standardized achievement tests and are used for general placement purposes. Ordinarily a Gray Oral test precedes the standardized test and acts as a "locator" instrument suggesting which level standardized test will most accurately test each registrant.

Standardized tests are not ideal diagnostic instruments, but they can be a beginning; and each test serves in this capacity.

Before describing further the diagnostic process presently utilized in the program the dual nature of the Albany instructional setup must be explained. A five-level self-contained teacher-directed program, spanning a range from beginning reading to high school-equivalency examination preparation, comprises the conventional program. Added to this part is a learning laboratory, a facility equipped with twenty-four carrels and a variety of material for programed or self-directed study. The lab can function as an instrument of the conventional program when students are assigned there during class time. The lab can also supplement the conventional program by providing extra study outside of regular class hours. Finally, the lab can function as the sole educational experience for any person who, because of schedule or preference, does not attend the conventional program. This person may elect to take a single subject or an entire diploma program. Devoting as much time to this education as he desires, he may write his own schedule. The learning laboratory is manned by an instructional specialist and an aide. The diagnostic operations to be described may be conducted by a classroom teacher, by the learning lab specialist, or both under the direction of the instructional supervisor. Most of the more specialized instructional materials, however, are in the lab.

The first item of diagnostic information which a standardized reading test can offer is whether there is any significant disparity between vocabulary and comprehension grade levels. If vocabulary lags, further diagnosis of sound-symbol relationships is indicated or perhaps entry into a specific vocabulary-building program is advised. If comprehension is demonstrably below vocabulary ability, then depth comprehension diagnosis should be prescribed. A brief investigation of the type of questions missed can generally suggest comprehension problem tendencies. Of course, if a person is a total illiterate, and approximately 10 percent of the student body is normally composed of complete nonreaders, he will get no further than the Gray Oral Exam. At that point he will be assigned to a special class in which total nonreaders are instructed by a teacher or an aide. A programed format is utilized, but such beginners are not allowed in the lab because their periods of self-direction are understandably very short.

Intensive diagnosis of sound-symbol relationships can be accomplished in several ways. Word-attack portions of published reading diagnostic tests may be used. Also the "plug in" tests of certain programed reading series may serve. However, in all such use it is essential to assure oneself that one is testing reading, not rote spelling. Many an adult can fill in the "a" in "flat" without having any real knowledge of what sound the "a" contributed to the word and with no ability to decode the same short "a" in an unfamiliar context. Use of nonsense words may help—but only for diagnosis, never for instruction. A card reader can also be employed diagnostically. The student can be asked to discriminate between a pair of printed words on the card by listening to the word on the tape and selecting a match.

If the diagnosis indicates a complete lack of knowledge of sound symbol relationships, the prescription will most likely be work in one of the linguistic reading series, which are characterized by strict control of phoneme content along with a good deal of construction and discrimination exercises involving similarly spelled words. Usually the problem is not quite so extreme. While one encounters some sight readers who have been able to generalize very little about the relationships of letters to sounds, most students do have a spotty knowledge of these relationships. Diagnosis tells which relationships have not been learned. Students must be slotted to the exercises they need. To do this classifying, the instructors, especially the lab specialists, must know their material. In fact, a flow chart of words and skill exercises is almost mandatory to enable the teacher to know on which page appropriate exercises may be found and in what order they should be done. Children's series often have such information available; adult series most often do not. One usually has to make one's own.

For that student who seems to need only a 'brush-up" on word attack skills, a videotape review series has been introduced. Most teacher-directed phonics review work can easily be transferred to audiotape and thus made a self-paced, self-directed exercise. This transfer, from teacher

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to audiotape, involves the loss of only one dimension—the ability to see the mouth formations of the speaker. This is an important dimension however, so by using videotape instead of audiotape, one manages to restore it. Thus, a student may sit in a carrel, have earphones mounted, pencil in hand, and make the necessary responses in a phonics workbook as the teacher's face appears on a small monitor and directs the exercise. Several of the commercial reading kits have specific exercises for word attack skills, also.

No matter which instructional material or device is used, constant evaluation and redirection by the teacher or lab specialist are necessary. Both commercially and teacher-prepared tests are needed to help the instructor choose the next learning step.

If the initial standardized reading test which a new student takes suggests that a student's main difficulty is reading comprehension rather than phonics, then depth examination must be made to pin point the type error most frequently made and determine whether a limited vocabulary acts as a comprehension retardant. Standardized tests generally use four main types of comprehension measures: 1) recognition of detail, 2) vocabulary in context, 3) main idea selection, and 4) inferential thinking. How the student scores in these four areas affects the teacher's choice of remedial reading material.

In some instances materials exist which are tailor-made to offer diagnosis and instruction in certain comprehension skills. Such materials are available to teach following directions, getting facts, locating answers, and using context. Other materials specifically zero-in on such skills as rating details in order of importance, finding hidden clues, and predicting outcomes. Some of these materials are programed; thus, they are ideal for an individualized program. Many other materials, however, are not programed. They follow regular workbook format rather than the repeated stimulus-response-feedback arrangement of the pure program. But a knowledgeable teacher, who is aware of exactly what each section of this more conventional material attempts to teach, can utilize any material successfully in an individualized program as long as the material has built-in evaluation exercises to help the teacher determine degree of success and direction of further study. Any number of kits and workbooks can function in this way. It takes work, judgment, and a good deal of cataloging, on the part of the teacher, but it can be done.

Such accommodation of individual differences cannot be met in a regular lockstep reading lesson in which each student reads aloud a small portion of a limited passage, which is then analyzed and dissected. Not only are the tasks not relevant to each student's prime needs but often the amount of text covered in such a lesson is so limited as to allow no build-up of interest, no momentum. But by allowing each student to read ever-lengthening passages at his own level, the teacher or lab specialist can help develop the reading "momentum" mentioned previously. The regular evaluation conferences between teacher and individual give the teacher not only a knowledge of the student's skill development but of his interests as well. The perceptive teacher will then attempt to find skill-building materials with relevant subject matter, if possible, and will begin to introduce the student to nonstructured materials. These will be chosen for interest and may likely be a magazine article or a newspaper column, at first. Books, usually anthologies with short entries, follow. The momentum keeps building. Reading ceases to be considered the first half of a school exercise. It becomes a vehicle to carry some students no further than the prescribed limits of job, marketing, and government forms. For others, a longer trip leads from a quest for knowledge to reading for enjoyment. What is described here, of course, is an ideal. Yet, every technique or process mentioned is in use in the Albany program in which one does not work from any inherited body of knowledge concerning individualized reading for adults. None exists. In Albany one tends to be a clinician rather than an academician, meeting a pressing need in the community. Again and again, when help is requested by a teacher or lab specialist, supervision is apt to begin with the words, "Why don't you try . . ." rather than, "This is what you should do."

In spite of lack of precedent one is genuinely surprised at the success. The writer is not claiming that adult basic education is without problems, only that reading improvement is often less of a problem than other facets of the program. It must be admitted that this success pattern does not hold too well for reading instruction of total illiterates, a level where organic problems become a more salient factor. But the improvement made by functional illiterates and the other poor readers is genuinely gratifying.

Innovation in Reading Instruction: An Adult Learning Center

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Although for the past six years the limelight has been captured by the large investment of federal, state, and local monies aimed en masse to improve reading on the elementary and secondary levels, major breakthroughs are taking place in adult basic education, too. This article concerns one of these major innovations: the development of learning laboratory centers in New York State for the express purpose of improving reading instruction for adults.

Following the example of North Carolina, where fundamental laboratory centers were set up throughout the state to upgrade the educational level of the population, conferences were arranged with the leaders of adult basic education programs in New York to explore the possibilities for setting up learning laboratory centers in Albany, Syracuse, and White Plains.

These cities embodied desirable characteristics, including 1) a pioneering feeling for innovation; 2) community support for improvement of adult education programs; and 3) a school building devoted solely or primarily to fulltime use by adult students with a core of trained adult basic education personnel—administrators, teachers, guidance counselors, recruiters, and secretaries. Also, the cities have unique features in terms of urban and geographic locations; and each locality had day and evening classes, permitting educational opportunities to a wide spectrum of educational needs and population characteristics (*1*).

During 1966-1967 the three communities operated the following number of ABE classes: Albany, 52; White Plains, 66; and Syracuse, 137.

The Laboratory Center as a Place of Learning

A major difficulty in adult basic education lies in the capacity of educators to draw adult illiterates, semiliterates, and dropouts back into a learning environment. Recruiters and guidance personnel frequently report the adult student's hesitation at returning to a traditional classroom structure and environment, one reminding him, perhaps, of past academic failure. Therefore, with the help of consultants from North Carolina and regional pioneers on the university and college level (*2*) the learning centers were constructed differently from the traditional classroom.

Labs were put in individual rooms and contained the following characteristics:

1. Twenty-four individual carrels similar to those found in language laboratories provided individual work stations.
2. Any adult entering the adult basic education program was exposed to the instructional media on a flexible schedule basis which suited his time and needs.
3. Programed and self-directed materials made up the basic core of the learning laboratory curriculum in reading and arithmetic, to accommodate adults below the ninth grade level (*3*).
4. Mechanical devices were acquired over a period of time, such as, Language master, Craig Reader, Honor Machine, reading accelerators, and reading pacers.
5. Large tables permitted small group instruction whenever necessary.
6. All instructional media were placed in a convenient location for easy reach of student and lab staff.
7. Individual student folders were prepared for students to place their instructional materials and charts indicating their daily progress.
8. Space for individual counseling was made available.
9. Opportunity to feel, touch, and ask questions of all the instructional media surrounding each shelf and wall was possible.
10. Necessary adjustments concerning class placement, schedule, level of instruction, contact with outside agencies, etc. are made to accommodate the adult.

Staff Requirements

All three communities staffed their learning centers with 1) a learning center specialist having knowledge and experience in reading, tests, and measurements and in dealing with adults of limited educational backgrounds and 2) a learning center aide with knowledge and experience in business education and having the maturity to communicate with adults.

Action Research Program

It was agreed the initial instructional program would test improvement of reading skills through programed and self-directed materials in comparison to the traditional classroom instruction available in most ABE programs. All three cities had implicit instruction to report successes and limitations with various instructional media. Basically, the goal was to determine what materials increase reading abilities of adults with educational backgrounds below eighth grade and what were the reactions of adults to the various media.

Experiences with Programed and Self-Directed Instructional Media

The action research conducted by the lab did not indicate any dramatic gains through testing devices provided by commercial publishers and the Stanford Achievement Pre and Post Test Scores. Certain effects, however, were observed:

1. Attendance increased in comparison to that of previous years.
2. Adults performing below the fourth grade level enjoyed working with the material for longer durations of time than did students performing above that level.
3. Placement and matching of student capability with appropriate level in programed and self-directed material were easier to execute than with traditional materials.
4. Linear programed material seemed to appeal to students of limited abilities, while branching programed material tended to confuse them. However, upper-class-level students enjoyed branching programed material more than linear programed material.
5. Students at all levels admitted that programed material and self-directed material with the answers available made it easier to cheat at first but after a while honesty prevailed and they no longer wanted to get at the answer first.
6. Programed and self-directed materials are not to be used as "independent tools" of instruction, as many publishers would have one believe. Programs that provided frequent testing of knowledge learned had greater appeal to students and teachers alike.
7. If programed and self-directed materials are to be used properly as instructional devices, teachers will need to spend considerable time in studying the manuals as well as student responses.
8. If teacher follow-up of student performance is not planned frequently, students lose interest in their work.
9. Development of a "Scale for Evaluation of Programed Material" has been prepared by the lab specialist and adult basic education director. It awaits publication and it has been found most useful to other ABE directors and coordinators (*5*).

Experiences with a Machine-Oriented Program of Multimedia Instruction

Current research concerns a program employing a multisensory approach to the teaching of reading to adults performing below ninth grade level (*4*).

Observations to date yield the following information:

1. A multimedia approach involving a combination of traditional instructional materials—such as workbooks—and multisensory mechanisms—such as,

tachistoscopes, reading pacers, filmstrip and sound sequences, and independent enrichment activities, etc., that fit into a precise pattern of instruction—can enrich enormously an adult education program.

2. The implementation of such a multimedia and multisensory instructional program is not easy to install within an adult basic education program. If the program is to succeed it will demand
    - a) extensive and intensive teacher training for a minimum of two weeks
    - b) specific training in the use of all machine components in order to provide teacher operation at an effective level of performance
    - c) the frequent service of a consultant from the company to assist with the implementation of the new curriculum into the classroom or learning laboratory setting
    - d) realignment of seating plans, electrical outlets, location of machines and books, etc., particularly if all of the classes are not going to be exposed to the total machine-oriented program
    - e) several flexible programs and schedules to meet the needs of different class levels and physical capabilities of both teachers and students
3. Adult education students are fascinated by machines in general. When they perceive a particular sequence for their individual use, their intensity and desire to master each tend to increase motivation toward learning.
4. Lab specialists will be needed to assist teachers for a minimum of two months before maximum efficiency of instruction can be provided.

The Instructional Media

Regardless of the media used in any learning setting, its success will largely depend upon the teacher's or lab specialist's motivation and desire to make it work.

And in order to make any media work, one must be prepared; i.e., one must have a thorough knowledge of what the media can do and how it is to be manipulated before it is exposed to the adult student who may leave the class, never to return, if he feels his time is being wasted.

No instructional media is likely to succeed in the hands of a teacher or specialist who is not committed to a career in adult basic education. This fact is especially true of programs providing not even an hour's time for preparation and using teachers hired on an hourly basis.

Characteristics of the educationally deprived vary. Because a certain program succeeded in one city is no guarantee it will succeed with another segment of the population. One is obligated, consequently, to seek out the approach that will work with one's specific students.

The aim of the lab is focused on individualized instruction. To "program" an individual it is necessary to conduct several diagnostic procedures first. To attain individualized instruction much professional talent and knowledge are required. No programed book, self-directed kit, or machine-oriented program—in spite of the publisher's claims—can do it.

The lab has found that students tire easily after sixty minutes of work with programed and self-directed materials while with machine-oriented materials students operate well during a ninety-minute period

The learning lab specialist must exercise great care, caution, and planning when introducing new schedules, methods, and materials to both teachers and students. The finest educational equipment, books, tests, techniques, schedules, and materials can easily be wasted if not carefully planned with the teachers. It is absolutely necessary to introduce each item at meetings or workshops. Heavy stress is placed upon teacher inservice training.

Special efforts are made by the adult basic education director and principal in receiving support for the programs from the community, adult education advisory council, community agencies, local newspaper, and concerned citizens. Final determination of the program rests with the board of education.

The Importance of the Learning Centers

One must stress the importance of the learning laboratories as centers of information for the New York State Education Department, Division of Continuing Education. Extensive reports are presented concerning the worth of new media, costs involved, inservice training, etc.

Mainly, the lab setting provides a daily opportunity for each teacher to become thoroughly familiar with the instructional media. The lab specialist and teacher can coordinate their teaching efforts. Together they can assess a students' strengths and weaknesses by informal and formal reading tests. Depending upon an adult's progress, changes to higher instructional materials are made. Detailed records of an individual's progress on a daily basis, whethr his attendance be regular or sporadic, allow the teacher and specialist the opportunity to fit the program to that pattern of attendance. One strives for maximum flexibility, and constant reassessment of each individual's progress.

Reactions of Adult Students

A student appears to discover that the guidance counselors, recruiters, teachers, and learning lab staff are all interested in him and in his success. Progress is interpreted in ways other than high scores on tests which in most cases are not adult oriented.

Students react favorably to properly timed graduation programs for sixth grade certificates and eighth grade diplomas, for such goals are always within sight.

By weighing physical capabilities and varying level of content, speed of teaching, and method of instruction the student knows every effort is being made to overcome his "perceptual dysfunctions" and "learning retardation."

Where Next?

The next step must be taken in the direction of a skill center laboratory as developed for elementary and secondary schools by Cohen (*6*); that is, an individualized, multiprogramed, self-instructional reading center capable of handling small group instruction and individualized instruction. Whether one can attain the same level of success skill station centers have had on the elementary and secondary level remains to be seen. Under Cohen's proposal, one would have to be involved with more detailed diagnostic procedures. The present labs can easily meet all the physical characteristics of the skill station center. The labs have acquired adequate skill in handling programed, self-directed, and machine-oriented programs. One knows that students learn from a multiprogramed approach, even though one cannot measure every aspect of performance because of testing limitations and lack of staff. The more workable aspects of each instructional media have been incorporated into daily curriculum. The adult basic education program has made significant contributions to the success of students in Manpower Development Training Programs and high school equivalency programs.

The instructional supervisor of the total adult basic education program and the learning laboratory specialist are continuously working out means by which a basic-core program will become easily recognizable as the learning lab branches into specific areas of remediation, extra instruction, enrichment, and acceleration. After completion of the current action research program, modes of instruction will be varied for day and evening classes.

The classroom will continue to provide one or more modes of learning. The learning lab grouped by skill stations will be able to provide the following:

1. Continuous upgrading of teacher skills in knowledge of reading and ability to perform informal diagnostic techniques that will insure student success by carefully matching needs and materials in an appropriate time sequence according to the adult's capacity for instruction.

2. Continuous utilization of teacher and lab specialist skills in developing new techniques and instructional media to upgrade instruction locally and to share with other adult basic education programs.

3. Opportunity to continue to evaluate instructional media and to

share the information on an ongoing basis through the department of basic continuing education.

4. Continue to integrate efforts with other programs in the building so that the student can perceive the attitudes and habits that go with a successful job performance. Through "consumer living skills," as developed by the state office, continue to indicate how an adult fits within the civic and economic institutions of the nation. Continue to assist the adult student to understand that his renewed commitment to education must be life-oriented and that it has definite possibilities for breaking out of the cycle of poverty and unemployment. Above all, emphasize how his return to school can inspire his own offspring to higher educational attainments by staying in school as long as possible.

5. Continue to explore with community agencies the possibility for correcting physical handicaps which may have gone undetected for many years, particularly by providing an eye test by a medical practitioner and properly prescribed glasses.

6. Finally, all the skills developed and all that has been tried with inservice training and workshops must be shared extensively with colleagues in adult education programs.

References and Notes

1. New York State Department of Education, Division of Continuing Education. *Evaluation of New York State Adult Basic Learning Centers.* Albany: The University of the State of New York, 1967.
2. The author of this paper is a doctoral candidate at Yeshiva University, New York City. His contacts and close work under Dr. S. Alan Cohen, professor of reading, made it possible for him to incorporate many aspects of Dr. Cohen's research and experimentation work with skill stations in a laboratory setting.
3. *op. cit, Evaluation of New York State Adult Basic Learning Centers.*
4. Current action research study being conducted at the White Plains, New York, Learning Laboratory Center. Study to be completed June 1968.
5. John G. Kacandes and Elliot Lethbridge. "A Scale for Evaluation of Programed Material for Use in Adult Education Programs," White Plains Public Schools, Adult Education Center, 1968, awaiting publication and copyright.
6. Alan S. Cohen. "Individualized Reading and Programed Instruction," *Programed Instruction,* Vol. III, No. 7, April 1964, pp. 3-6. (The author, John G. Kacandes, is currently working with Dr. Cohen on a paper indicating the possibilities of the skill station concept developed by Dr. Cohen and its implementation to an adult basic education learning laboratory center.)

Computer-Assisted Instruction in Adult Basic Education

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Today, as never before, one constantly relies on the use of automated devices which serve a myriad of functions. The banks process accounts; the airlines schedule reservations, and the engineer seeks solutions to complex problems through the use of automated equipment. One is not likely to witness a decrease in reliance on automated equipment but, rather, an upsurge in its usage and an increase in its capabilities in coming years. In one's eagerness to experience the new and different, a danger looms. One may become so eager to use the automated devices that one fails to recognize all the shortcomings as well as the potentials of automation. The ultimate value of automation can only be realized when one has acquired an understanding of each system used for instructional purposes (*3, 4*).

Our experiences in adult basic education during recent years certainly indicate that every resource must be explored to find a more effective means for involving larger numbers of undereducated adults in accelerated programs. During each of the past three years, learning opportunities have been provided for more than 400,000 undereducated adults. One is well aware that many of these individuals failed to acquire the level of skill development essential for functioning in society. However, even if one assumed that each enrollee satisfactorily met the standards for functional literacy, it becomes obvious that many years would be required before the present 35 million undereducated adults could become functionally literate. Therefore, one must be vigilant in efforts to discover and utilize any means which may be employed to educate greater numbers of undereducated adults in a more efficient and less time-consuming manner.

One system which undoubtedly will be of much value in adult basic education, as well as in other levels and areas of instruction, is computer-assisted instruction. The etiology of the current emphasis on sophisticated computer programs can be attributed to Skinner who developed parts of the learning theory which served as a basis of instruction by automated devices. He also applied his theory of learning to the development of a teaching-machine, a forerunner of the current and more elaborate computers. Pressey, of course, developed the first "teaching machine" in 1927.

The IBM 1500 Instructional System, which is used in the research and demonstration project at North Carolina State University, entails a variety of equipment which may be used in combinations to provide the most desirable or effective method for teaching a particular element of a unit. The full computer-assisted instructional system will include a) a system for presenting audio messages from a device under control of the computer; b) a typewriter by which the student may interact with the computer or receive information; c) a CRT (cathode ray tube) for the interaction of student and computer with a keyboard and "light pen" for student input; and d) a rearview slide presentation device, capable of holding 1000 slides, each individually addressed and presented under computer control.

Potential Values of Computer-Assisted Instruction

There are computer-assisted instructional programs which are well designed. However, it must be recognized that few of the potentials of good computer-assisted instructional programs are inherent in the programs themselves but, rather, in the way they are developed. In other cases, the value is inherent in the design of the system. Some of the potentials follows:

Instruction for the undereducated adult can begin at the level at which each student is functioning. An evaluation can be made through the use of placement tests to ascertain the entrance level of proficiency or skill of each student. Each student can then enter the program at his appropriate level, a policy thus enhancing efficiency and maintaining motivation. Individualization of instruction has not been possible or practicable in most conventional programs since funds were usually not available to maintain a desirable student-to-instructor ratio. All too often, only one class could be justified in a locality; and since the students represented a wide range of skills, achievement was often extremely varied.

Varying amounts of instructional time for each student to develop his understanding of the subject matter or to develop proficiencey in a skill *can readily be modified without penalizing other students* who are more or less capable. Remedial work can be individualized since there is great variability in the learning rates of students. Those who need several different learning situations for success may be provided with these situations and may move systematically to the next stage of the program whenever they are ready to do so.

There is generally little restriction on the amount of instructional time which can be provided a student, particularly in large computer-assisted instructional systems. Students who have more time than others to devote to learning usually can have a station available. In the conventional program, instruction could be provided only at the scheduled period when the teacher was available.

Computer-assisted instructional programs can be designed to accommodate a wide variety of interests of students. This is a highly desirable characteristic since an increase in age often brings a greater diversity of interests. Units can be developed on many topics and can be available on a "cafeteria" basis, depending on student interest. Examples include those topics which would be of greater interest to women than to men or vice versa.

Instructional programs may be prepared for those of differing backgrounds. For example, a "conventional" program designed for a group in an urban area may be related to topics for which those from rural areas lack the requisite skills or experience. Their shortcomings would only add to their frustrations brought about by a lack of success in learning situations previously encountered.

Computerized programs provide for carefully sequenced instruction. Sequence is of vital significance since learning at one level usually serves as a prerequisite to success at the next higher level. Even though the rate of learning may vary greatly among students, the sequence usually remains constant.

Computer-assisted instructional programs also provide for feedback of information to the student and the feedback which indicates success may serve as a reinforcement of learning.

Continuous diagnostic information may be provided the monitor and instructor. This information should serve as a blueprint for the instructor to provide additional remedial assistance when necessary.

Computer-assisted instructional programs may provide learning opportunities for a greater number of students. The number of students served by computer-assisted instruction at a given time can be very large, often restricted only by the number of stations connected to the central unit at that time. Computer-assisted instructional systems now being installed can provide for 200 students simultaneously. Futher systems being designed may serve 1,000 students at once.

Principles of Computer-Assisted Instructional Program Preparation

There are certain guiding principles which must be adhered to when preparing computer-assisted instructional programs. These principles are applicable to the preparation of all instructional materials. There are three principles which are of vital importance, and the success of the computer-assisted instructional programs hinge upon them:

Irrelevant material must be eliminated. The purposes and objectives are too often clouded by including in course content irrelevant materials, concepts, information, and skills. This padding creates a selection problem for the learner and is unduly costly since more programing and computer time are required. The learner may experience difficulty in separating the relevant from the irrelevant and, therefore, not fully learn the course content and thus fail to meet the behavioral objectives. More time is required of the learner when irrelevant materials are included, and this time could be used more efficiently in the acquisition of other knowledge and skills.

There must be no gaps in the presentation of the concepts, knowledge, or skills. Since careful attention must be given to each step in the presentation of the material, it is mandatory that the material being presented first be arranged in an logical and orderly manner. Not only must the scope be determined (i.e., the content to be presented) but the sequence in which the material is to be presented must be carefully planned; otherwise, the students would encounter presentations which are designed to develop established concepts and skills for which they lack the requisite knowledge and skills. One deterrent to learning at any level is undoubtedly the lack of an adequate background for the task presently being undertaken.

Each step in the sequence for developing concepts, acquiring information, and developing an understanding and facility in the use of a skill must be mastered before proceeding to the next step. After the scope and sequence have been determined and before the instructional program has been prepared, careful attention should be directed toward assuring that the program demands a mastery of each phase in the program. The program author cannot assume that all students will develop the concept or acquire facility in the application of a skill with a single presentation, or a single approach, or a set amount of practice. Therefore, the computer-assisted instructional programs must provide for remedial work as and when required as well as a constant evaluation of learning to insure mastery of each phase of the program.

Computer-assisted instructional programs for adult basic education can be written for the following kinds of interaction between the author and the student: 1) drill and practice; 2) tutor and test; 3) diagnosis and prescription; 4) problem-solving; 5) gaming; 6) simulation; and 7) informational retrieval.

Limitations of Computer-Assisted Instructional Programs

A recognition of the potential values should not preclude an understanding of the limitations of computer-assisted instructional programs. Computers may be used to teach facts, logic, and concepts; that is, they may function quite well in the cognitive domain. However, the limitations of the computer in developing certain skills have been identified rather succinctly by Bright (*1*):

> . . . they can't do everything. They do not teach the student to formulate ideas or to express his ideas clearly and defend them against criticism of his peers. They do not teach him to speak confidently before a group or to learn that when you talk to different groups, you express things in different ways. They do not teach him to use color in what he writes or what he says. They do not develop the student's creative ability. These are the things that are really going to be important in the society of 1980 and 1990.

Computer-assisted instruction cannot do everything. The computer does not have artificial intelligence. Yet computer-assisted instruction seems limited in its future use only by the imgaination and innovative skills of the authors involved in writing programs of instruction for adult students.

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Teachers in Adult Basic Education Programs

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Consider the status of adult education today. Adult learning, it is recognized, is part of the greater education community—it still has little professionalism of its own. But there is renewed emphasis on continuing education for professional needs as well as for problem-solving. In this regard, it is even more apparent to educators and bureaucrats that adult education in the field of illiteracy is unfinished business and that it must have access to the new technology of education while developing its own characteristics as a way for human interaction and communication.

Historically, specialized training for adult educators was first offered in a single course at Teachers College, Columbia University, in 1929. Thirty years later, 14 institutions of higher education offered some work in specialized training and 12, advanced-degree programs in adult education.

In the past ten years, course offerings available to those interested in becoming professional adult educators have increased to some extent. A greater number of persons have enrolled in them; the demand for teachers for adult basic education has increased, and people are being pushed into adult-education jobs by circumstances—without having had the necessary training for this specialized teaching.

Much has been written about the need for improving the educational standards in all of higher education and in courses of adult basic education in particular. But administrators and educators are still uncertain about which standards should be raised and what criteria are simply training in *method*. To quote Whitehead, "Some of the major disasters of mankind have been produced by the narrowness of men with good methodology."

In fact, the single contribution to research and teaching made by adult educators has been "group dynamics." And this contribution has achieved national acclaim. Along with all professional educators in this country, professors of adult education are presently rethinking the design of an educational program that will better prepare those in this career. Many educators are following a pattern of curriculum design and analysis which was developed by Ralph Tyler (Center for the Advanced Study of the Behavioral Sciences). Tyler, distinguishing between professional *education* and *training,* explains: "What the learner takes away from an educational program is a new way of carrying on his own behavior."

Thus, in training one to do a highly specific job which has been laid out beforehand—for instance, bricklaying—the "bricklaying" can become habit forming. The bricklayer practices his skill by following the model of an expert bricklayer. As he learns how the job is done through practice and if he gets personal satisfaction or reward from doing it properly, this method ultimately becomes his continuing repertoire of behavior.

It is relatively simple when the purpose is to learn the skills of a trade. By this is meant an occupation that is highly specialized. In such areas the necessary skills can be demonstrated. But it's different with a *profession.* When one deals with a profession, one is talking about something in which the specifics *cannot be laid down* because new problems arise constantly, and thus new knowledge in how to deal with them must become available.

Evaluation of Basic Education Programs

In 1965-66 Greenleigh Associates conducted a field test and evaluation of four adult basic education systems. The design provided for testing the learning systems under three levels of academic preparation of teachers: 1) trained teachers, preferably experienced in adult education; 2) college graduates; and 3) high school graduates. Actually it was possible to locate only a few teachers "trained and experienced" in adult education. Most of the trained teachers had elementary school certificates.

Teachers were selected by local school districts in consultation with the project staff according to criteria agreed upon by three federal agencies. In addition to the level of preparation, selection criteria included interest, warmth, motivation, flexibility, understanding, patience, maturity, and the ability to become involved positively in an assignment of this kind. Each classification of teacher was assigned to his specific learning system on a random basis.

Teachers received orientation to the project from Greenleigh Associates' staff and training in the use of their learning system from the publishers of the system.

Results

Based on observation and the students' responses, it was evident that the teacher was crucial in the field test: the ability of the teacher to communicate with the students affected the total class morale, and to a large extent students learned much from the teacher over and above reading skills.

As explained earlier, there were three levels of teacher preparation: certified teachers, college graduates without teacher training, and high school graduates. Other than fully trained and certified teachers were used because almost every community has a shortage of certified teachers to meet the demands of ongoing education systems. If functionally illiterate adults are to be given compensatory education, there will not be a sufficient number of trained teachers available. Therefore, if untrained teachers were successful, it was felt that trained, experienced adult educators could be used as supervisors and master teachers, thereby spreading their skill over a large number of students.

It is important to note that in the process of recruiting teachers, a large reservoir of college and high school graduates was found, while there was not a large reservoir of certified teachers in any state.

A major finding of the research was that the level of teacher preparation was not an important factor in relation to the gains in reading achievement. On one test used there was no statistically significant difference in gain scores by level of teacher preparation. Within a battery of tests, some subtests showed significant differences in gain scores. In every such case it was at the level of the high school graduate teacher that the better scores were achieved.

Consider the characteristics of these teachers. Based on such gross indicators as family income, place of residence, previous occupation, and education, most teachers were "middle class." In one community where special effort was made, there were some teachers from the socioeconomic group of the students. Recruitment sources there included a low-income housing development, and one teacher was a former AFDC mother.

Most of the teachers were women in their thirties and forties; a few were past retirement age. By groups, the average ages were 35 for the college graduates, 37 for the high school graduates, and 42 for the certified teachers. The racial composition also differed: Negroes comprised about half of the high school graduates, a third of the certified teachers, and a fourth of the college graduates.

The adult education directors in the local school systems who were responsible for recruitment tried to find teachers with the qualities of maturity, warmth, sensitivity, understanding, and perceptiveness on the theory that these traits could be applied in the teaching of adult basic education to the benefit of the students. In addition, an understanding of poverty, the family structure of the welfare recipient, and the needs and aspirations of this population was desirable. These understandings were present in some teachers, and as much information in these areas as possible was included in the preservice training. Toward the end of the field test, teachers especially those who had initially had reservations regarding the "type" of individual who would be in the class, expressed having gained greater understanding in this respect.

It was observed that the retired and older former elementary school teachers found it most difficult to break the habit of treating students—even adults—like children. In general, it appeared that teachers of average age, 38 or younger, were more flexible and better able to establish rapport.

In an effort to more clearly understand what qualities should be looked for in teachers for functionally illiterate adults, trained educators and reading and learning theory specialists were used to observe the classes. In addition to formal and informal class observation, these specialists participated in informal discussions at coffee breaks, lunch, before and after class, and in brief teacher meetings. In order to test the validity of such observation, the research personnel in each of the three states were asked to rate the teachers. Comparison of these ratings and the changes in reading levels of their classes showed no correlation. Even so, there were some observations related to educational theory and practice which were considered valid as directional signals.

It must be remembered that the reason for experimenting with other levels of teacher preparation is that trained teachers are in short supply. The field test showed that the high school graduate achieved better results on the basis of gain scores than the certified teachers who were available. The high school graduates were more likely to be Negro and younger than the certified teachers. Whether these factors contributed to the better gain scores cannot be determined.

On the basis of observation, the teachers who were high school graduates could cope with a "normal" range of problems and follow the procedures of the publishers. They showed capacity to learn, had interest in the academic and social advancement of the undereducated adult, showed ability to relate to adults, and indicated interest in continuing in the field of adult education. A few displayed a sketchy understanding of language and insecurity in the role of a teacher. A few had poor pronunciation, spelling, and grammar skills. Many had considerable self-confidence and good language skills. Such differences in language skills should be taken into account in recruiting.

The major observed weaknesses of the high school graduate teachers were the inability to diagnose and correct teaching difficulties and the inability to attack a problem in a variety of ways. In some instances these teachers were not aware of difficulties that were beyond their capacity to identify or alleviate and, in the process, became frustrated. In addition, many needed to develop skill in simple instructional techniques of grouping, class management, and academic planning for instructional purposes.

The availability of skilled supervision and both perservice and continuing inservice training would help such teachers overcome these problems.

College graduates were generally more comfortable in the relatively new situation of teaching functionally illiterate adults. These graduates seemed to relate well, had enough educational background to provide answers, or knew where to go to look for answers. As a group, they appeared to be more cheerful and optimistic and were most ready to accept the idea of adult basic education as a necessary and socially desirable commitment. They generally felt that education was one of the basic steps in the attack on poverty. Their ability to accept new programs and new methods was also quite apparent. This condition might be, predicated on the fact that they had not been exposed to a number of teaching systems and were quite willing to accept a system which had a logical and demonstrable base for accomplishing results. They usually had no particular educational philosophy and, therefore, could accept any system easily. College graduates, as a group, were extremely sensitive to the needs of the adults in their classes. They became personally involved and tried to help their students solve their problems or make adjustments to them.

The certified teachers generally showed the greatest ability in planning classroom organization and grouping initially. Since most of these teachers held elementary certification, their training and experience had been with children. Some therefore, had difficulty in relating to an adult learner population. Most certified teachers had been exposed to a system, or "THE system," and had developed standards as to what constituted teaching and lesson preparation. Their approach to materials was influenced by their commitment to basal readers and/or workbooks, and some had blind spots in selecting supplementary materials for adult usage. The certified teachers were basically better equipped to handle the normal frustrations which occurred in teaching functionally illiterate adults. They had the patience to adhere to systematic repetitive drill and were innovative in selecting different approaches to the same material. Their training in teaching basic language skills appeared to be a strong factor in unlooking the complexities of learning to read.

Conclusions and Recommendations

From observation there is strong evidence that preservice and, more especially, inservice training and supervision are paramount requirements for teachers, regardless of background. This fact would be particularly true in programs free of the limitations imposed by this field test, with its rigid adherence to assigned text materials and publishers' instructions. It would then be possible for the teacher to be more creative and to introduce additional materials and methods.

Because there are very few persons in any community who have had experience teaching the economically and socially deprived adult, all teachers entering into adult basic education should be given an intensive preservice training course to prepare them for this endeavor. This course should include training in the materials to be used; in understanding the student population; methods of establishing rapport with the students; and techniques of grouping, teaching, and helping individual students. Information about resources available to help with specific problems should also be included.

It is certain that there will not be enough certified teachers available to meet the total need, so there should be more experimentation using high school graduates with good preservice training in adult basic education. Training and employing high school graduates would have two effects: 1) meeting critical manpower shortages and 2) upgrading the persons who are available.

In any adult basic education program, time should be planned for continuing inservice training of teachers. This training should provide an opportunity for teachers to discuss common problems, share experiences, and suggest changes in curriculum or approach. Inservice training should not be planned too rigidly in terms of content but should be able to adapt to the specific needs of the teachers at any given point.

Teachers should have day-to-day supervision by a master teacher thoroughly familiar with adult basic education. This requirement is particularly important if untrained teachers are to be used. It is clear that untrained teachers can be effective in teaching reading skills to functionally illiterate adults. However, such teachers appear to need more supervision by a master teacher who can help them identify emerging learning problems, assist them in grouping students according to level of achievement, and keep all groups continuously at work. This practice would also make better use of scarce professional teachers by spreading their skills over a larger group.

In general, the observers agreed that the personality and attitudes of the teacher and her ability to relate to the students as individuals were the key elements in making learning an exciting experience. How to select persons with the requisite personality and attitudes has not been answered in this field test. It is an area needing further research and study.

Similarly study and research must be undertaken in the kinds of training persons who will teach functionally illiterate adults should have. In the field test, teachers learned how to use the reading systems to which they were assigned. Some came with basic skills of teaching techniques and class management. In two systems, teachers were given considerable latitude in applying known techniques. However, on the basis of gain scores alone, there is no evidence that such skills were important. This result points to the need to test adult-student gains by using various teaching methods and techniques.

Another area needing further study is how much consideration should be given to ethnic background and age in teacher selection. As has been said, the older former elementary teachers were least able to establish rapport with the students. Whether the average age of the certified teachers 42, compared with 37 for the high school graduate) was a factor could not be established. Neither was it determined if the fact that a high percentage of the high school graduates were Negro was a factor in the significant differences in gain scores for the high school graduates. In both New Jersey and New York the majority of students were Negro and so were their high school graduate teachers. This condition may have affected gains. The most successful teacher in terms of gain scores was a certified teacher who was a Negro with a predominantly Negro class.

Obviously, one is now at a stage where some of the answers are known. Answers are not handed down from the great storage vaults of knowledge. This is not an area in which one accepts the lessons of today as immovable. This is an area in which adult education gives standards for a great developing society. However, the knowledge held today will be obsolete tomorrow. One has no problem adjusting to that. But, in the areas of human values, human development, social organization, and solutions to educational and social problems there is difficulty in adjustment.

Here is an area where the adult education process becomes so special that it allows for an acceptance of education with the utilization of all new methods and technology. One can experiment—one can explore —one can innovate.

In view of this future, what should be the concern of higher education, and what should it expect from its program? These are very tough grounds, and the concerns are crucial. One says that in a free society the vital thing is to remember that goals and power must be shared. This combination is what makes a society free. Society gives responsibility to the leader. Leadership has to interpret, at any given time or place, the role of free society.

The most crucial role that higher education can play is to develop an atmosphere that allows for the development of continuing education as a process of transition for individuals, communities, and organizations that will permit them to participate effectively in this technological society. One has to talk seriously about the educational system itself being a participant in society—that's a grave responsibility. It's much easier to play the other role—the consultant role—and compare people and suggest solutions—but not to be a responsible participant accepting the consequences of involvement. It seems that one no longer looks at adult education as just a mechanism for the corrective factor—for remedial activities. The catch-up, disadvantage, renewal, retooling, upgrading processes are ever present at all levels, in every profession, and in every area. The writer is suggesting that one look beyond this matter to the role of higher education in developing the necessary resources for correction.

How does one find talent and develop it? One must move realistically into the community and interpret its resources and its responsibility as participants in society. One should find those alternatives or options which involve one in education—where one can be responsive when entering a situation with resources, willingness, and commitment to search for possible solutions, programs, and program evaluations. Too often answers are expected to come from "on high" because one assumes that research gives insights which can be implemented immediately and that benefits are immediately available.

A very crucial part of this educational process is the adaptation of human skill and insights so that they can be the transition of knowledge into practicability. The writer believes that one of the broadest and most important challenges given to adult educators is to find talented personnel: the interlacing of education administrators, teachers, counselors, innovators, and evaluators who will be involved in the total education process. Let one look openly to find a way in which the total educational system itself builds its potential maximum of resources, understanding and insight, self-criticism, and self-evaluation to produce an exceptional talent for the administration of adult education.

The Emerging Professional Role of the Teacher in Adult Basic Education

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A number of writers and spokesmen in the adult basic education field have recognized the need for further development of training programs for its teachers. For example, Neff (*4*) analyzed the results of a questionnaire sent to the fifty state directors of adult education. The respondents were asked to identify what they saw to be the critical issues facing adult basic education. Twelve key issues were identified, and second in order of priority as listed by the directors was teacher training. In respect to this issue, the directors were concerned with such matters as who is responsible and what should be the content of training, as well as the need for colleges and universities in each state to provide this training.

As part of a preliminary fact-finding phase of a research project with which the writer was associated (*1*), questionnaires were sent to local adult education directors from all over the country. Interviews were also held with directors and other key personnel of basic education programs in the Midwest area. In general, the conclusions were that many of the present basic education teachers had had no substantial training in teaching adults to read and that these teachers were often not aware of the psychological and sociological problems of their adult students.

In an address at the International Reading Association Convention in Dallas in 1966, Minnis (*3*) presented an admirable case for college and university involvement in adult basic education. Minnis felt that institutions of higher education must be involved if the goals of a truly extensive and successful program of adult basic education were to be accomplished.

These statements and others like them seem to indicate clearly the need for increased efforts by teacher-training institutions to become involved in adult basic education work. Looking at this problem from a reading specialist's point of view, it seems only reasonable to expect that an effective teacher of adult basic education must have extensive preparatory training.

One does not assume that one can sufficiently train a remedial reading teacher for the public schools in two weekend workshops, as has sometimes been the case in adult basic education. On the contrary, it is felt that the remedial reading teacher should have had prior classroom experience and then generally a master's degree level program to be duly qualified to work with disabled readers at the elementary and high school levels.

Should one really expect to accomplish the training task in much less time for a teacher who is to work with adult beginners? Based on experience with teaching adults, the writer would maintain that at least equal competencies to that of a remedial reading teacher in public schools is necessary for an effective adult basic education teacher. And, in many ways, the unique problems presented by such adult subjects may call for even *more* skill on the part of the basic education teacher.

At this point permit the writer to add that he is not impressed with the so-called "teacher-proof" materials idea as a solution to teacher-training inadequacies. It has been his experience that materials of this type have not fared particularly well in remedial work on the elementary and high school levels, and it is not believed they will in adult basic education work either. These adult subjects have short attention spans and problems in self-directing their learning just as a disabled reader at the elementary school level does. Thus, active teacher involvement in the learning process seems necessary.

Before moving on to some ideas on the specific nature of this training for basic education teachers, the writer would like to bring the local public schools into this discussion concerning who is responsible. In conversations with workers in adult basic education, the writer has often found himself in the position of having to defend teacher-training institutions because of their apparent failure to become involved in this vital area.

Although there are a number of reasons, some of which are bound up in historical tradition, one reason for the failure of higher education institutions to move rests with the public school systems of this country. Teacher-training institutions do look to the public schools for indications as to what directions training programs should take. It is the writer's opinion that the lethargy exhibited by higher education in adult basic education can, in part, be traced to the same lethargy existing in local school systems.

Until a climate can be established where public schools commit their time, money, and resources to adult basic education, teacher-training institutions will continue to lag behind in their responsibilities. The writer fully realizes the complexities of legislation and tradition which impede this public school commitment, but he still maintains that this goal must be realized. Public school involvement will not only go a long way toward enhancing adequate teacher-training programs but can also result in better organized and more extensive developments in the entire basic education program.

The Teacher Training Program

It is not believed that an adequate training program for adult basic education teachers will differ very much in general form from a program for prospective elementary and secondary teachers. Two recent articles have dealt with both the necessary qualities for adult basic education teachers and their problems in curriculum and instruction (*2, 5*). Both the qualities and the problems discussed are very similar to those discussed in journal articles concerning elementary and secondary school levels. In fact, in both these articles, the words *elementary school teacher* or *high school English teacher* could be substituted for *basic education teacher* without any loss of impact.

Most of the following suggestions regarding a training program for adult basic education teachers are not new and have been suggested on numerous occasions by experts in the field. In fact, some training institutes already in operation have provided similar programs. In those cases, the writer's suggestion is that the efforts be expanded in breadth and scope.

Sociology and Psychology

It would seem imperative that the adult basic education teacher be exposed to certain important sociological concepts that are keys to understanding these undereducated adults. One concurs with other writers who have maintained that it is not absolutely necessary for basic education teachers to have been born and raised in the same environmental settings as their students. However, it would seem necessary that the teachers have an appreciation and understanding of the social backgrounds of their students.

Such teachers should in a practical and realistic way come to realize the home and community pressures and problems with which the undereducated adult must cope. This background prospective can broaden the vision of the basic education teacher beyond that of simply teaching the recognition of words in print.

Fully as important as a sociology background in the preparation of adult basic education teachers is a firm psychology base. Teachers should be introduced to the psychology of the adult learner, particularly the undereducated adult; and teachers should then be exposed to general techniques and methodology applicable to adult basic education classes. (The writer makes this recommendation with certain reservations as it appears to be that much of the "knowledge" concerning adult learning is based on very dated research and is, furthermore, not completely applicable to the adult who is undereducated.)

One emphasis in the psychological background of the basic education teacher which must receive considerable attention is the measurement and evaluation area. Just as the remedial reading specialist in elementary and secondary schools must possess skills to identify intellectual, emotional, and personal strengths and weaknesses of disabled readers, the basic education teacher must be sensitive to these qualities of the adult students.

Vocational and Family-Living Orientation

Reading teachers working with undereducated adults must be made aware of the vocational and daily-living abilities, aspirations, and needs of their students. The basic motivating force for many of these students will lie in these areas, and teachers must orient much of what they do toward these goals. Giving teachers a firm background in this area should result in their making every attempt to keep the content of their classes meaningful to the students. Expertise in various vocational education areas, including industrial arts and home economics, should be brought to bear on this aspect of teacher training.

Organization and Structure of Adult Education Programs

Just as one feels it is important to introduce the prospective elementary and secondary teacher to school organization and administration, one feels a thorough training program for adult basic education teachers should include a consideration of these matters. Teachers should become familiar with procedures and problems in organizing and administering adult education programs. They should see how basic education fits in with other aspects of adult education. A historical perspective to the adult education movement would also seem in order.

Reading and Language Arts Methodology

Obviously with the writer's background being what it is, he puts great importance on this aspect of training. Adult basic education teachers should have a firm grasp of the nature of the reading process and the skill necessary to be a good reader.

Specific skills in the word perception and comprehension areas should be discussed, and their teaching, demonstrated. Use should be made of such technological aids as video tapes and audiotapes so that prospective basic education teachers will not only be exposed to theoretical postulates but can see and hear the ideas put into practice.

Teachers should be made aware of the ever-increasing number of instructional materials in basic education. They should be given opportunities to examine these materials with the purpose of evaluating them against established criteria.

The goal of this reading-methodology sequence should be to develop adult basic education teachers who have a firm grasp of both *diagnosis* and *remediation*. The writer fully realizes those at the college and university level do not always accomplish this goal in preparing other teachers, but this failure does not mean one should ignore this objective in this new area. The type of adult basic education teachers one wants to see trained are those who do know the strengths and weaknesses of their students and who then have appropriate strategies at their disposal to capitalize on the strengths and overcome the weaknesses.

To further help develop these competencies, one strongly recommends that training programs include some type of internship experience for the prospective adult basic education teacher. The teachers-in-training would be assigned to some already existing program. There they could be given opportunities to put into practice the ideas they had received in their training and could explore ideas of their own. Supervision could be a joint responsibility of the teachers in the adult programs and the higher education institution. Schedules permitting, a very desirable adjunct to this on-the-job experience would be a seminar in which the prospective teachers could share experiences.

Although reading methodology has been stressed up to this point, one would certainly strongly recommend a language arts emphasis so that teachers would be able to develop the skills and abilities of their students in the speaking, listening, writing, and spelling areas.

Other Considerations

The training program described in the preceding sections is essentially that of a reading specialist. If this is the main function of the adult basic education teacher, then one suggests that such teachers be also well aware of other content areas of relevance to undereducated adults, areas such as arithmetic and citizenship. As with the reading-methodology area, teachers should become aware of both techniques and appropriate materials in these areas.

Some may react to the program outlined as being one that cannot be implemented in the time normally available for training adult basic education teachers. The writer's answer to that criticism is to suggest one change the length of training time rather than change the program. Surely a program such as the one described would involve at least one summer session and two college semesters—leaving some doubt if even *that* is long enough.

It is felt this program should carry college credit just as any regular teacher training does. As a matter of fact, this program could develop into a master's degree program with the same degree of prestige that a reading specialist program for elementary and secondary teachers has now. If it were a master's degree program, both A.B. and B.S. graduates could be eligible.

This matter may all seem very idealistic, but it is a necessary step. Short-term institutes can only be a temporary answer. The program discussed is a second step. Eventually the day should come when the high school graduate entering college with the idea of a teaching career will see adult teaching as an alternative in the same way as secondary and elementary programs are now. That day will not be realized until the commitments discussed earlier are made, but the writer is pessimistic enough to think that is in the distant future.

Role of The International Reading Association

There are certain steps that can be taken to accelerate the growth of more adequate training programs for teachers of adult basic education. The writer believes that the International Reading Association can develop a plan of attack so that this matter can be brought to the attention of the appropriate people.

A start has already been made in the right direction. For the past few years, the IRA annual conventions have included program sequences directly concerned with adult basic education, although the meetings have not always been well attended. The Eleventh Perspectives Conference is another positive sign. It has been the writer's experience that college and university people involved in the field of reading instruction look with great interest to the publications that result from Perspectives meetings. Having a volume that represents some of the best thinking available in the adult basic education area should have some impact in the right places.

Joint Committee

However, there is much more that can be done. It appears that a dialogue must be initiated between the two professional groups most vitally interested in adult basic education. Therefore, the first suggestion is that a joint committee be formed with representatives from both the International Reading Association and the Adult Education Association.

Both groups have common interests, yet have different insights which should be shared. This committee would have as one of its major responsibilities the task of thinking through in considerable detail what the preparation of an effective adult basic education teacher should be. This committee could go into much greater detail than presented here. It could draw upon the resources of workers now in the field, and hopefully the end result will be a position paper in which a model training program is clearly delineated.

Another task one would assign to this committee, a task which overlaps considerably with the first one, would be that of taking a stand regarding qualifications or, if you will, certification requirements for adult basic education teachers. The IRA has provided this kind of leadership with respect to remedial reading teachers in elementary and secondary schools, and the writer maintains that this issue must be dealt with in adult basic education work, too. It seems that standards or certification requirements for teaching are a necessary but not sufficient condition if a truly professional role is to emerge for the adult basic education teacher.

One is not so naive as to think that these matters can be dealt with very easily. The question of who is best suited to do this type of teaching is a controversial one. This committee must provide a forum where all sides and opinions are expressed, and then the attempt must be to resolve this issue.

Membership Drive

The writer strongly suggests the International Reading Association undertake a campaign to encourage present adult basic education teachers to join this professional group. This matter can be most effectively accomplished on the local council level. Such a membership drive will profit both the adult basic education teachers and the other association members. Then, right within the local community there can be a meeting of the minds of adult teachers, local public school teachers, and college and university staff members.

Local councils should also be strongly encouraged to include in their programs presentations pertaining to adult basic education. Local basic education programs could be described and brought to the attention of school people who may know very little about what is being done. Within a local area the result can be an interest which could result in pressure being put on colleges and universities to begin offering extensive teacher training programs.

Publications

One would also suggest to the editors of the IRA publication, *Journal of Reading,* that they actively participate in seeking more manuscripts pertaining to adult basic education in order to keep the key issues and problems in this field before the eyes of members. The writer has seen a number of worthwhile articles pertaining to this field which appear in such journals as *Adult Education* and *Adult Leadership.* Such articles have and should have a place in the reading profession's journals, too.

As the writer thinks back over the recommendations made, they sound like a bombardment approach; and perhaps that is the right plan of attack. It is felt the key to encouraging and enlisting higher education participation in adult basic education teacher training does rest at the local level. If all educators interested in reading instruction do appreciate the problems and see the need for further efforts and can present a united front, then the case can be taken to those who ultimately have the power and authority to initiate training programs. Scattered efforts to exert pressure which do not have the firm backing of those who should be interested have failed and will continue to fail. Another vital area of interest within the reading area is developmental reading on the junior and senior high school levels. One can learn a great deal from the mistakes that have been made in attempting to persuade people of the need for teacher training in this area. Some attempts have been undermined not by those who had no background and thus little interest but rather by those in the reading field who should know better.

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